Therapist Reflective Functioning, Therapist Attachment and Therapist Effectiveness

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Abstract

There has been increasing recognition over the last two decades that there are significant differences between therapists in terms of their effectiveness, but we have little understanding of the therapist attributes that contribute to this difference. It is known that many commonly measured variables, including therapist gender; type of training, number of years of training and theoretical orientation do not contribute to explaining differences in effectiveness. Nor is therapist effectiveness related to common personality variables like extraversion.

Many theorists have suggested that the principles elaborated by Bowlby regarding the role of early attachment are applicable to therapists in their relationship with clients. To date relatively little empirical research has been undertaken into the relationship between the attachment status of therapists and therapeutic effectiveness. One of the aims of the research reported here is to clarify that relationship.

Similarly the reflective functioning is being accorded increasing importance within the therapeutic process, but the relationship between the therapists' capacity for reflective functioning and therapeutic outcome remains relatively unexplored. The primary objective of this research has been to test for a relationship between therapist mentalization and therapist effectiveness.

Reflective functioning, also known as mentalization, describes a process which involves making sense of one's own mental states and the mental states of those around us. Reflective functioning involves can be both explicit and implicit processes. Both cognitive and affective processes are included in reflective functioning, which overlaps several related concepts, such as empathy, theory of mind, psychological mindedness, mind-mindedness, introspection, insight, self-awareness, mindfulness, emotion intelligence and metacognition. One of these, empathy, has been found to be relevant to the process of therapy. In part,

empathy involves making sense of the mental states of others. The concept of reflective functioning, or mentalization, includes this, but extends the concept to include making sense of one's own internal mental states.

In the light of the issues outlined above, this study extends previous research by clarifying the relationship between therapist reflective functioning and therapist effectiveness. 25 therapists were assessed for reflective functioning and attachment by means of interview and self-report measures. Client outcomes were assessed by collecting an outcome measure, the OQ-45, at each therapy session. Therapist effectiveness was defined in terms of the slope of the pattern of change in scores on an outcome measure, the OQ-45, completed by the therapists' clients over the course of therapy. The data was analysed by means of hierarchical linear modelling, using a 4-level model, with therapy sessions nested within clients who were nested within therapists who were nested within clinics. Initial severity and therapy setting were controlled by entering them as covariates.

Therapist reflective functioning was found to be a significant predictor of therapist effectiveness. Therapist attachment measured by self-report was not found to be significantly predictive of therapist effectiveness. However, a significant interaction was found between self-report attachment anxiety and reflective functioning, which was strongly predictive of therapist effectiveness.

The results of this study have several implications. They indicate that, as hypothesised, therapist reflective functioning is associated with therapist effectiveness. This has implications for our understanding of what takes place in therapy, and also potentially for the selection and training of psychotherapists. The interaction between reflective functioning and self-reported attachment indicates that therapists whose mentalizing capability is greater than their attachment anxiety are likely to be effective, whereas therapists whose attachment anxiety is greater than their ability to mentalize are likely to be less effective. This makes

sense in terms of the concept of the therapist as wounded healer, a concept with a history stretching back to Ancient Greece.

This research has filled a gap in current knowledge by establishing that therapist reflective functioning is significantly associated with therapist effectiveness. The research is built on an extensive theoretical foundation, drawing links between attachment theory, cognitive science, social psychology, psychoanalysis, phenomenology and humanistic psychology and several other traditions. Other strengths of this research include the ecological validity that comes from using a real-world sample, the depth of statistical analysis provided by hierarchical linear modelling and the fact that outcomes were assessed for each session using a well validated instrument.

Further research is needed to further clarify the role of self-reported attachment anxiety in therapist effectiveness. In addition, research into the extent to which reflective functioning can be fostered by training is needed. This would have strong implications for psychotherapy training.

Statement of Original Authorship

The work contained in this thesis has not been previously submitted to meet requirements for an award at this or any other higher education institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made.

Signature: QUT Verified Signature

Date: 3 September 2013

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CHAPTER 1

INTRODUCTION

1.1 Overview and purpose of this chapter

The intention in this research is to examine the role of therapist reflective functioning and related attachment processes in the genesis of therapist effectiveness. This will be done through examination of the literature, through theoretical and philosophical reflection, and by means of empirical investigation. This chapter establishes the research problem and gives an overview of the remaining chapters in the document, indicating how they fit together to provide a thorough examination of these issues.

1.2 Research problem

The study of psychotherapy outcomes has made it clear that some psychotherapists are more effective than others (Bergin, 1963; Beutler, 1997; Blatt, Sanislow, Zuroff, & Pilkonis, 1996; Brown, Lambert, Jones, & Minami, 2005; Crits-Christoph & Mintz, 1991; Lafferty, Beutler, & Crago, 1989; Lambert, 1989; Luborsky, et al., 1986; Luborsky, McLellan, Diguer, Woody, & Seligman, 1997; Luborsky, McLellan, Woody, O'Brien, & Auerbach, 1985; Lutz, Leon, Martinovich, Lyons, & Stiles, 2007; Najavits & Strupp, 1994; Okiishi, Lambert, Nielsen, & Ogles, 2003; Okiishi, et al., 2006; Shapiro, Firth-Cozens, & Stiles, 1989). The means by which these differences in effectiveness have been established will be explored in detail in the next chapter. It is also clear from the studies mentioned above that differences in therapist effectiveness are not explained by differences in the level of therapist experience, education or training. This study seeks to explore the factors which do contribute to explaining such differences between therapists.

Reflective functioning is the process of reflection on mental processes, including cognitive and affective processes, taking place both intrapsychically and interpersonally. While a number of threads converge to suggest that the capacity of the therapist to mentalize or reflect while under affective stress may be a relevant factor in explaining differences in therapist effectiveness, most of the research into reflective functioning has measured the reflective functioning status of the recipients, rather than the providers of psychotherapy. Several studies have explored the role of related concepts, such as empathy, yet the relatively few studies that have examined therapist reflective functioning have not related it to outcome or effectiveness. This omission leaves a gap which the current paper seeks to fill.

Research into reflective functioning has grown rapidly in recent years (Bateman, Fonagy, Allen, & Gabbard, 2009). This research has suggested a significant role for reflective functioning in protecting people from the effects of attachment trauma and overcoming childhood difficulties. The concept of reflective functioning has been noted to overlap the concept of empathy, one of the attributes of psychotherapists specified by Carl Rogers as necessary for therapeutic change (Cho-Kain & Gunderson, 2008). Despite this, there has been minimal research into psychotherapists' reflective functioning, and its potential role in psychotherapeutic effectiveness.

1.3 Aims

The main aim of this research is to investigate the relationship between therapists' reflective functioning capacity and psychotherapeutic effectiveness. The thesis also examines the relationship between the related concept of therapist attachment security and therapist effectiveness.

1.3.1 Research Questions

In investigating these aims, this research addresses the following three questions:

a) Are greater levels of therapist reflective functioning associated with greater therapist effectiveness?

b) Are greater levels of therapist attachment security associated with greater therapist effectiveness?

1.3.2 Benefits of the Research

The relationship between therapist factors and therapist effectiveness is complex. By clarifying the role of therapist reflective functioning and therapist attachment in the contribution of the therapist to positive psychotherapy outcomes, this research extends the existing knowledge of the role of reflective functioning and attachment in the therapy process. Previously that knowledge was largely confined to the role of reflective functioning and attachment in the patient. This new knowledge has implications for the selection, training and practice of psychotherapists.

1.4 Definition of important terms and brief background

Since this thesis examines the relationship between therapist reflective functioning, therapist attachment and therapist effectiveness, we begin by briefly outlining here what is meant by reflective functioning, attachment and effectiveness. Each of these concepts will be explored in more detail in later chapters.

1.4.1 Reflective functioning

Reflective functioning, also known as mentalization, or mentalizing, is "the process of making sense of mental states in oneself and other persons" (Allen, 2003, p. 91). Reflective functioning can be implicit or explicit, meaning that it can be carried on largely outside awareness or with conscious intent. Reflective functioning can relate to the self, the other, or both. Reflective functioning can be mainly cognitive, mainly affective, or both (Fonagy, Bateman, & Bateman, 2011). As might be expected, given the multiple facets involved in the

concept, reflective functioning overlaps or incorporates conceptual territory covered by several other concepts, including empathy, theory of mind, psychological mindedness, mind-mindedness, introspection, insight, self-awareness, mindfulness, emotion intelligence and metacognition. Of particular relevance in terms of the aims of this paper is the overlap with the concept of empathy, which has been fairly extensively researched in relation to the person of the therapist. Empathy has been described as the most important facet of mentalizing (Allen, 2006). Empathy is contained within the half of reflective functioning that involves making sense of other people's mental states. In addition, reflective functioning involves making sense of one's own mental states. Reflective functioning will be examined in greater detail in CHAPTER 7.

1.4.2 Attachment

Attachment theory combines insights from ethology, evolutionary theory and cognitive science to provide a framework for understanding early social development in humans on the basis of the concept that humans have an inbuilt drive to attach to an adult caregiver which is expressed via an attachment system, which is responsive to the prevailing environmental conditions. Attachment theory has extended its early focus on infants to become a comprehensive theory which explains many of the interpersonal interactions of adults as well as infants. Attachment theory will be examined in detail in CHAPTER 5.

1.4.3 Therapist Effectiveness

There is considerable evidence that some therapists achieve better results, on average, for their clients than other therapists achieve. The evidence for this assertion will be reviewed in CHAPTER 2. Effectiveness is generally measured by tracking client progress by means of some type of outcome measure, and aggregating the results across the clients of a therapist.

1.5 Overview of the thesis

This thesis is composed of three major sections. The first section (Chapters 2 to 7) examines the theoretical and research background of the areas to be explored. The second section (Chapters 8 to 10) covers the practical research component of the thesis. The final section (Chapter 11) discusses the implications of the results of the research described herein, and examines its implications, its limitations and its strengths.

Chapter 2 explores in detail the concept of psychotherapeutic effectiveness, covering theoretical considerations and previous research into the topic. In doing so, it outlines in more detail the basic problem which this thesis seeks to address, which is the current lack of an adequate explanation for demonstrated differences between therapists in terms of effectiveness.

Chapter 3 extends chapter 2 by exploring some of the factors thought to make for effective psychotherapy in terms of the part played in them by therapists. It begins by briefly reviewing evidence for the efficacy of psychotherapy. This leads into an examination the debate about the role of so-called specific factors and common factors in the effects of psychotherapy. From the standpoint of specific factors, it explores the concepts of adherence and competence, and related research. It then looks at the relationship between these concepts and outcome. From the standpoint of common factors, it examines the therapist contribution to the alliance. This leads into an introduction to factors originating in the client-centred therapy tradition, which are explored in greater detail in the following chapter.

Chapter 4 examines previous research into factors thought likely to explain differences in therapist effectiveness. In doing so, the chapter critically explores the work of Carl Rogers and associates, and examines the theoretical and philosophical issues involved. In doing so, it makes clear the current lack of a sufficient theoretical base for explaining therapeutic effectiveness, paving the way for the introduction of attachment theory in the following chapter.

Chapter 5 explores the background and development of attachment theory, examining its strengths, weaknesses and controversies. Exploration of the history and development paves the way for a discussion of the relationship between attachment theory and therapist effectiveness in the following chapter.

Chapter 6 examines existing research into the relationship between attachment and the therapeutic relationship. Exploring the idea that the provision of a secure base for the client is an essential aspect of therapy and that securely attached parents are best at providing a secure base for their children leads to the proposal that securely attached therapists will be most effective in helping their clients. The chapter examines explorations of attachment and the therapeutic alliance, explorations of attachment and countertransference. The chapter concludes that these provide preliminary support for a relationship between therapist attachment and therapist effectiveness, which is yet to be directly established.

Chapter 7 provides the history and theoretical background of the concept of reflective functioning, also known as mentalization. The chapter goes on to examine the relationship between reflective functioning and the therapeutic process. Attention is given to the roots of reflective functioning in attachment theory, in psychoanalysis, in cognitive science and in social psychology. The overlap of reflective functioning with such concepts as empathy, theory of mind, mind-mindedness, metacognition, psychological mindedness and perspective taking are explored. Chapter 7 also examines ways of measuring reflective functioning.

Chapter 8 presents the rationale for the current study, in the light of the literature reviewed in the preceding chapters. It identifies the hypotheses and expected results, giving details of how the hypotheses are to be operationalized in the study.

Chapter 9 provides a detailed description of the methodology employed in the current investigation. Details of the participants, the materials used, the procedures and analytic tools involved are stated in detail.

Chapter 10 reports the findings of the study. The chapter begins with an overview of the descriptive statistics and examines the assumptions of the statistical methods. Each of the research hypotheses are then analysed and results reported in detail.

As indicated earlier, Chapter 11 discusses the implications of the results obtained, and explores their ramifications. The chapter also details the limitations and strengths of the research, and outlines directions for future research.

CHAPTER 2

THE EFFECTIVENESS OF PSYCHOTHERAPISTS

2.1 Overview and purpose of this chapter

This chapter explores in detail the concept of effectiveness in relation to psychotherapists. The chapter grapples with the meaning of effectiveness at practical, theoretical and philosophical levels. The chapter explores the history of the concept of therapist effectiveness, the evidence from previous research into therapist effectiveness and some of the controversy around outcome measurement. Thus, it lays the groundwork for an examination of the critical problem which forms the core of this thesis, namely the current lack of an adequate explanation for demonstrated differences between therapists in terms of effectiveness.

2.2 The effectiveness of psychotherapists: "supershrinks" versus "pseudoshrinks"

Ever since the publication of a study entitled "Supershrink" (Ricks, Thomas, & Roff, 1974), the psychotherapy research literature has been sprinkled with studies which demonstrate that some therapists are more effective than others. The Supershrink study described a clinician whose clients, boys considered to be highly disturbed, had extremely positive results, which were maintained when the boys were followed up as adults. The study contrasted this clinician with "therapist B", who had extremely poor results at long-term follow up with cases of similar difficulty. Therapist B was later given the epithet "Pseudoshrink" (Bergin & Suinn, 1975). These terms have stuck and become symbolic of the differences found in a variety of studies over subsequent years, between more effective and less effective therapists.

2.3 Evidence for Therapist Effects

2.3.1 Studies directly investigating therapist effects

Studies demonstrating that there are significant differences between therapists in terms of their effectiveness span several decades (Beutler, 1997; Blatt, et al., 1996; Brown, et al., 2005; Crits-Christoph & Mintz, 1991; Lafferty, et al., 1989; Lambert, 1989; Luborsky, et al., 1986; Luborsky, et al., 1997; Luborsky, et al., 1985; Lutz, et al., 2007; Najavits & Strupp, 1994; Okiishi, et al., 2003; Okiishi, et al., 2006; Shapiro, et al., 1989). Such studies are typically said to demonstrate that "variations in success rate typically have more to do with the therapist than with the type of treatment" (Luborsky, et al., 1986, p. 501). This is a consistent finding across many studies, over many years, with recent studies continuing to find significant differences in therapist effectiveness. Therapists have been found to contribute between 0% and 38% of the variance across different studies (Crits-Christoph & Mintz, 1991).

For example, a recent study which treated therapists as a random variable in a nested, multilevel modelling design, found that differences in therapists accounted for 17% of the variance in rates of patient improvement (Lutz, et al., 2007). The study examined the rates of improvement of 1,198 psychotherapy outpatients who were seen by 60 different therapists. The number of patients seen by each therapist ranged from 10 to 77. The criterion variable, in terms of outcome, was the T-transformation of a score called the MHI. The MHI consists of the sum of the scores of three separate patient-rated scales: the Subjective Wellbeing Scale, the Current Symptoms Scale and the Current Life Functioning Scale, which are 4-item, 40-item and 24-item scales, respectively. These measures, which are part of the Compass tracking system (Beckman & Lueger, 1997), were completed before each therapy session. The slope of the relationship of MHI to $\log_{10}$ of session number was the indicator of change, with an anchored baseline. The data was analysed using a three-level hierarchical linear

model. Initial client factors, were controlled for by using them as level-2 covariates, in order to take account of potential differences in therapist case-mix. These included baseline MHI scores, initial therapist ratings of symptom severity on the Global Assessment Scale (GAS), patient reported level of prior experience of psychotherapy, patient rated chronicity and self-reported patient expectations of treatment. Interestingly, this study has been criticised for its use of anchoring, on the grounds that anchoring "overestimates patient variability and consequently underestimates therapist effects" (Wampold & Bolt, 2007). If that criticism is correct, the therapist effects may have been even greater than the 17% reported in the study.

A much larger study involving 10,812 psychotherapy clients and 281 therapists (Brown, et al., 2005), compared the mean residual change scores on outcome measures for the clients of the most effective 25% of the therapists with those for the clients of the remaining 75%, and found that change for clients of the more effective group was an average of 53% greater than for the others, a result which was significant at the $p<.001$ level. This finding clearly suggests that therapist effectiveness is related in some way to the person of the therapist. Furthermore, this difference was not related to client diagnosis, sex, previous treatment history or level of distress at intake. Nor was it related to therapist level of training or experience.

Another study which used Hierarchical Linear Modelling to examine patient outcomes, analysed the Outcome Questionnaire-45 (OQ-45) data from 1779 people seen at a University Counselling Centre by 56 therapists. This study found that the average rate of change for the patients of therapists whose clients improved the fastest was 10 times greater than the sample mean. The study also found that for some of the therapists at the lower end of the rate of change continuum, their patients actually showed an increase in symptoms over time (Okiishi, et al., 2003). Although these results demonstrated clear differences between therapists, these differences in effectiveness were unrelated to therapist theoretical orientation

or type of training, again suggesting that the person of the therapist makes an important contribution to therapeutic effectiveness.

Less dramatic, but nevertheless clearly significant, examples of therapist effects on outcome have been found in a number of studies involving the reanalysis of data from controlled clinical studies. These studies were conducted originally with the intent of evaluating the relative efficacy of different "treatment" approaches, as part of the recently popularised "evidence based treatment" approach to psychotherapy research, which is modelled on drug trials within the medical model. These reanalyses have, in a number of cases, found that purported "treatment effects" disappear when therapists are added as a variable, presumably because the supposed effects are the result of the assignment of more effective therapists to one condition than to the other.

Among the more prominent and controversial of these reanalyses are those involving data from the National Institute of Mental Health (NIMH) Treatment of Depression Collaborative Research Program (TDCRP: Elkin, et al., 1989). This large multicentre study involved the comparison of Cognitive-behavioural therapy (CBT), interpersonal therapy (IPT), imipramine plus clinical management (IMI-CM) and placebo plus clinical management (PLA-CM) in the treatment of depression. When the data was examined from the viewpoint of the original purpose for collecting it, it was found that, taking the sample as a whole, there was limited evidence that two conditions – imipramine plus clinical management and IPT – were better than placebo plus clinical management, and no evidence that there was any significant difference between IMI-CM, IPT and CBT. When patients were divided into more and less severely depressed groups, there were no significant differences between treatments, including placebo, for the less severely depressed group, but for the more severely impaired group "there was some evidence of the effectiveness of interpersonal psychotherapy with these patients and strong evidence of the effectiveness of imipramine plus clinical management" (Elkin, et al., 1989, p. 971). When the TDCRP data

was reanalysed more than a decade later, it was found that including therapists as a random factor resulted in the small treatment effects previously reported disappearing, to be replaced by the therapist as the main factor influencing outcome (Kim, Wampold, & Bolt, 2006). This finding became controversial, however, when a second reanalysis, conducted by researchers involved in the original study, found no significant therapist effects (Elkin, Falconnier, Martinovich, & Mahoney, 2006). As a part of the resulting controversy, it was pointed out that the study which found no therapist effects had eliminated such effects by treating those therapists who demonstrated significant effects as outliers. Since it is only by eliminating effective therapists that therapist effects in these studies can be nullified, it can be argued that the data examined above supports the idea that the person of the therapist contributes to therapeutic outcome and that in the context of clinical trials it may typically account for between 5% and 8% of the variance in outcome (Wampold & Brown, 2005). In naturalistic settings it is likely that the proportion of variance accounted for would be higher, since most clinical trials involve measure intended to eliminate or minimise therapist effects.

2.3.2 Alliance-outcome research

The therapeutic alliance has consistently been found to be predictive of outcome (Baldwin, Wampold, & Imel, 2007; Barber, Connolly, Crits-Christoph, Gladis, & Siqueland, 2000, 2009; Martin, Garske, & Davis, 2000; Marziali & Alexander, 1991; Meyer, et al., 2002). This is important in terms of examining the literature regarding therapist effectiveness, because many studies of factors that may be implicated in therapist effectiveness do not directly measure the effect of those factors on outcome, instead measuring their effect on the alliance.

The concept of the working alliance originated within psychoanalysis (Bordin, 1979). It was further elaborated by Bordin (1979) to include goal agreement, task agreement, and the development of a bond between patient and therapist. The concept has since been

operationalized in a number of instruments, most notably the Working Alliance Inventory (WAI: Horvarth & Greenberg, 1989), and has been consistently found to be associated with positive therapy outcome. A recent meta-analysis, examined 211 studies, involving 190 independent investigations into alliance and outcome. That meta-analysis reported a distinct but modest aggregate effect size of r =.275, with a confidence interval of .249 to .301. The meta-analysis also reported considerable variability between the studies included (Horvath, Del Re, Flückiger, & Symonds, 2011).

The alliance is clearly a relational concept. The effect of the alliance on outcome could conceivably be due mainly to client factors, wherein clients who are good at forming an alliance with their therapist do well and those who are not good at forming alliances with their therapists do poorly. On the other hand, the effect could be mainly due to therapist factors, in that those therapists who are consistently good at forming alliances with their clients have better outcomes than those who are not so good. A third possibility is that the effect is mainly due to the match between client and therapist, so that clients and therapists who happen to "click" with one another are the one who have good outcomes.

The relative contribution of client and therapist to the effect of alliance on outcome was explored in a study involving 331 clients and 80 therapists, in which the Working Alliance Inventory (WAI: Horvarth & Greenberg, 1989) was completed by the clients prior to the 4th session (Baldwin, et al., 2007). The outcome measure used in the study was the OQ-45. Using multilevel modelling, the investigators explored how the relative contribution of within-therapist and between-therapist contributions to the relationship between the alliance and outcome. They found that, within the group of clients seen by each individual therapist, there was no significant correlation between differences in alliance and outcome (p=.11). On the other hand, between different therapists, there was a clearly significant relationship between the alliance and outcome (p <.01). There were no significant interactions, indicating that the alliance-outcome correlation was not due to the match between client and therapist.

This study provides substantial evidence to support the importance of the therapist as a significant factor in the effectiveness of the psychotherapy process, and raises the question of what differences between therapists contribute to the ability of one therapist to form more positive alliances with their clients than another therapist.

The idea that therapists differ in their alliance capability is further supported by data from another recent study (Dinger, Strack, Leichsenring, Wilmers, & Schauenburg, 2008). This study investigated therapist variability in alliance and outcome in an inpatient setting. The study involved 50 therapists and 2544 patients. Therapists accounted for 33% of the variance in ratings of the alliance on the helping alliance questionnaire and there was a significant difference between therapists in the extent to which alliance with their patients predicted outcome. However, in that study, the association between therapists and outcome was only 3%. The authors explain that discrepancy as resulting from the nature of inpatient treatment, in which one patient receives input from multiple therapists and other situational factors are involved.

The studies described above have recently received additional support from a meta-analysis of studies reporting alliance-outcome correlations (Del Re, Horvath, Flückiger, Symonds, & Wampold, 2012). This meta-analysis examined 69 studies into the relationship between alliance and outcome, selected on the basis that the original study provided sufficient information for the proposed meta-analysis. The investigators sought to explore further the possibility that client effects are unimportant and therapist effects are the main contributors to the alliance-outcome correlation, as suggested by the paper by Baldwin et al. (2007) described above. They hypothesised that, if this were the case, then whereas a study with many clients and only one therapist would show no significant correlations between alliance and outcome, a study with many therapists and only one client per therapist would show a high correlation between alliance and outcome. Thus, the ratio of clients to therapist in a study should predict the level of correlation between alliance and outcome. This hypothesis

was supported by the data, even when potential confounds, such as source of alliance rating (client or therapist), source of outcome rating, and instrument used to measure alliance were controlled for, in a multilevel modelling approach. Thus, taken together, the studies reported in this and the preceding paragraphs strongly support the importance of investigating therapist factors in the psychotherapy process.

2.4 How do we know when therapy is effective?

Therapists' effectiveness in the studies described in section 2.3.1 above is defined in terms of the outcomes therapists helped their clients to achieve. An effective therapist is one for whom the majority of clients achieve positive outcomes and an ineffective therapist is one for whom the majority of clients with a similar level of disturbance fail to achieve positive outcomes. This makes sense, and yet hinges on the basic assumptions that we know what sort of outcome is positive, and that we are capable of accurately measuring such outcomes. In other words, it assumes that the methods for measuring psychotherapeutic outcomes are valid, and that they are measuring the sort of change that is brought about by effective psychotherapy. That proposition is not entirely uncontroversial.

In the first place, there have historically been multiple methods of measuring outcome, in terms of measurement technique, measurement source and in terms of the timing of the measurement. The most common measurement technique by far has been the questionnaire. However, multiple other methods have been used, including structured, semi-structured and unstructured interviews as well as assessment of external criterion variables, such as degree of participation in the workforce or reduction in drug and alcohol consumption. The source of information has included the client, the therapist, third parties such as spouses, parents, teachers or work colleagues, as well as trained observers. Timing of the measurement has varied from data collected before or after every therapy session to retrospective reports some time after the end of therapy.

In the second place, there is a longstanding controversy regarding the extent to which psychotherapy is about symptom relief versus the extent to which psychotherapy is about structural change in personality (Wallerstein, 2001). The outcome measures used in the studies quoted previously are generally measures of symptom relief rather than structural change in personality. In addition, the outcome measures used in the studies quoted are all self-report measures, which may also be questionable given the considerable difference in views expressed in the assessment literature about the relative merits of self-report measures as compared with other measures seen as tapping more implicit, or less conscious, attributes (Josephs & Bornstein, 2011).

In the main, proponents of structural change in personality have been from psychoanalytic/psychodynamic schools of thought, whereas strict behaviourism focussed almost exclusively on symptom relief. In more recent times, the marriage of behaviourism with the cognitive approach, combined with the gradual blending of ideas from psychodynamic and humanist traditions, has made the distinction less clear-cut, and of course, psychoanalysts have generally been interested in symptom relief as well as structural change in personality.

Differentiation between symptom relief and structural change in personality goes back at least as far as Freud, who said that an analysis ends "when two conditions have been approximately fulfilled: first, that the patient shall no longer be suffering from his symptoms and shall have overcome his anxieties and his inhibitions; and secondly, that the analyst shall judge that so much repressed material has been made conscious, so much that was unintelligible has been explained, and so much internal resistance conquered, that there is no need to fear a repetition of the pathological processes concerned" (Freud, 1937, p. 219).

Structural change in personality has been defined as "the reliquification of pathological structures that have emerged in the course of a biography and the reorganization or reintegration of the intrapsychic conflicts and vulnerabilities imbedded in them" (Rudolf,

Grande, & Oberbracht, 1997). Such a definition, and indeed, the word "structural", tends to confine the term to the psychodynamic field of discourse, and indeed, as will be discussed later, many might dispute the existence of the personality "structures" which are supposed to be changed. However, the concept of structural change in personality need not be defined in such culture-bound terms. Essentially the same concept can be found, for example, in the field of cognitive behavioural therapy under the name of "schema change".

As can be seen in the quote from Freud above, the idea of structural change in personality is associated with freedom from relapse, whereas symptom relief is associated with feeling better. Proponents of psychoanalytic and psychodynamic approaches to therapy tend to believe that long term therapy promotes relapse prevention and have been able to produce supporting evidence for that assertion. For example, a study involving data from long-term psychoanalytic psychotherapy compared the use of three different outcome measures as predictors of retrospective outcome evaluations at 1 year and 3 year follow up points. The three outcome measures were the Global Severity Index (GSI) of the Symptom Checklist-90-Revised, which is a self-report measure of symptomatology, the Inventory of Interpersonal Problems (IIP) and the Heidelberg Structural Change Scale (HSCS), which is an interview-based measure of structural change in personality. In evaluating data from 53 patients who received therapy from psychoanalytic therapists in private practice, the study examined the proportion of variance in retrospective outcome evaluations accounted for by pre-post therapy changes in each of the candidate measures. Percentages of variance at the end of therapy accounted for by pre-post changes in the measures were as follows: GST, 26.5%; IIP, 45.3%; HSCS, 21.7%. Percentages of variance at 1-year follow-up accounted for by pre-post changes in the measures were as follows: GST, 9.7%; IIP, 17.2%; HSCS, 25.3%. Percentages of variance at 3-year follow-up accounted for by pre-post changes in the measures were as follows: GST 1.4%; IIP, 5.6%; HSCS, 19.9%. At 3-year follow up the HSCS remained a highly significant predictor at the $p<.001$ level, whereas neither of the

other measures was significant. The investigators interpret this as evidence that structural change in personality is important in promoting long-term effects in the life of the patient, and go on to propose that:

> Because change processes often continue beyond the end of therapy, the complete scope of these effects is not necessarily immediately visible to the patient. As a result, it is frequently only with hindsight that patients recognize and appreciate the value of their therapy. The patient's experience at the end of therapy is more strongly influenced by other therapeutic effects, namely by changes in the areas of symptom distress and relationship problems. When it comes to evaluating those specific therapeutic changes that will have a long-term effect on the patient's life at this point in time, a clinical expert assessing the structural changes seems able to provide a more reliable judgment, with which the patient somewhat ''belatedly'' then agrees (Grande, et al., 2009, p. 355).

The main limitation of the study discussed above is undoubtedly the use of retrospective outcome evaluations, which as the authors themselves point out, have been strongly criticised by others (Hill & Lambert, 2004). However, Hill and Lambert, in their discussion of retrospective outcome evaluations, indicate a marked difference of understanding of the purpose of retrospective outcome evaluations relative to that for which the study reported above is using them. Hill and Lambert are essentially comparing the accuracy of retrospective reports as measures of emotional state at a specified point in the past with self-reports of emotional state completed at that point in the past. This is not the purpose for which Grande at al. are using them. Grande et al. do suggest that future research might benefit from using a method other than retrospective reports, but unfortunately fail to suggest what that method might be.

2.5 Philosophical issues surrounding the concept of structural change in personality

The concept of structural change in personality presupposes that one accepts the existence of structures within the psyche, and indeed that one accepts the existence of the psyche in the first place. Both of these are likely to be problems for behaviourists. However, they may also be problematic for people whose philosophical stance is existential, phenomenological or post-modern. Depending on which of these viewpoints one takes in examining the idea of structural change in personality, one may be concerned about the impossibility of experiencing such structures, or one may see in them the reification of metaphorical approaches to understanding.

In order to overcome such objections, it may be necessary for proponents of the structural change approach to outcome measurement to reframe the concept in terms more widely acceptable. One possible way of doing this would be in terms of narrative, which is a term acceptable to most, if not all, philosophical approaches. One might then contrast symptom reduction with, for example, changes in self-narrative, or variations in the degree of conflict between differing dialogical positions within a self-narrative. Such an approach would, of course involve losses as well as gains, since structures and narratives are clearly not direct equivalents. Nevertheless, changes in self-narrative may be measurable, and such changes may reflect the same kind of enduring change that the proponents of structural change in personality are talking about.

2.6 Differences in measurement method

The outcome measures most widely used in psychotherapy research, which are generally measures of symptom reduction, are also most commonly “self-report” measures. That is, they take the form of questionnaires filled out by the client and as such, can be

expected to more or less reflect the conscious perception of that person, perhaps slightly distorted by social desirability factors.

The outcome measures that have been developed to measure structural change in personality are almost all, by contrast, interview based. They involve some sort of structured or semi-structured interview, which is then coded by a third party according to a rating scale or scales. In other words, they are based on the analysis of narratives. There are, of course, also interview measures of symptoms as well. The difference of importance here is not so much whether the measure is an interview or a self-report. The main issue is the type of information sought. The method of obtaining the information, while relevant, is a separate issue. Just as it is possible to elicit information about symptom change by means of an interview, it may also be possible, although more difficult, to elicit information about structural change in personality by means of self-report.

In fact, the usage of the term "self-report" is somewhat misleading, in that it could be justifiably applied to the interview measures, in which the participant is reporting things about themselves, whereas in so-called "self-report measures" the participant reports nothing, but instead ticks boxes or circles numbers, choosing between options chosen by the designer of the measure. The difference between the two kinds of measure is roughly similar to that between a multiple-choice exam question and an essay question. The two examine different levels of knowledge in some sense. A relatively superficial knowledge of a subject area will enable one to recognise that one answer is true and another false. A far greater depth of understanding is required to write an essay.

Although the terms "self-report" and "structural change in personality" are both questionable, they will continue to be used in this thesis because they are the terms in common use in the literature. It is well known that correlations between self-report and interview measures purporting to assess the same concept is often relatively low (Josephs & Bornstein, 2011). There are, of course, notable exceptions, such as the relationship between

the Hamilton Depression Rating Scale and the Beck Depression inventory. It has been widely argued that one of the main differences between interview and self-report measures is that what is communicated in self-report measures is under greater conscious control, whereas interview measures yield far more information that the person did not consciously intend to communicate, including information that was outside their conscious awareness. This difference has also been related to the difference between explicit and implicit memory.

The differences between explicit and implicit memory are described by Nelson (1995) as follows:

> Explicit memory is usually taken to refer to memory that can be stated explicitly or declared, that can be brought to mind as an image or proposition in the absence of ongoing perceptual support, and/or of which one is consciously aware. Implicit memory is often taken to reflect a constellation of abilities, such as the acquisition of motor or cognitive skills, classical conditioning, and priming. In addition, it is memory of which one is generally not consciously aware (Nelson, 1995).

Parallels have been drawn by many between implicit memory and the psychoanalytic unconscious. Undoubtedly there are similarities and overlap. Among the differences are that, whereas the Freudian unconscious is supposed to consist of contents which were once conscious but which have been repressed, much of implicit memory is assumed to have never been conscious. Furthermore, it is assumed to be non-conscious because of being stored in a different memory system rather than because of being repressed.

In addition to the two methods of measurement discussed so far, a third measurement method specifically aimed at assessing implicit processes has been developed by social psychologists. This is known as the implicit association test (IAT: Greenwald, McGhee, & Schwartz, 1998), and involves measuring reaction times for responses to paired stimuli presented by computer. The potential for applying this method to assessing psychotherapy is

beginning to be realised, but to date seems only to have been explored with regard to therapy for social anxiety (Gamer, Schmukle, Luka-Krausgrill, & Egloff, 2008).

Since there are clearly differences in what is measured, depending on the measurement method, why is it that the vast majority of psychotherapy outcome research uses self-report measures of symptomatology? Undoubtedly the main reason lies in the practicalities. These measures are easy to administer, whereas interviews are expensive and time consuming. Reaction-time based measures, while less time consuming than interviews, are still more time consuming and complex to administer than questionnaires, and have less face validity. Nevertheless, they may well be worth exploring. The other reason why most investigators use self-report measures of symptomatology is that there is now a large literature base with which to compare their results.

2.7 The problem of method variance

The process and outcome of psychotherapy has been studied from many perspectives using many methods. Common data sources include self-report, therapist report, reports from third parties such as relatives, colleagues or teachers, ratings by trained observers and data collected by technological means, such as pulse-rate monitors or galvanic skin response measurement devices. A case can be made of each of these approaches, as well as for combining all of them. It is well known, however, that the correlation between data from varying sources tends to be quite modest (Hill & Lambert, 2004). No doubt some of this is due to differences in what the instruments involved are measuring, such as the implicit/explicit or conscious/unconscious differences already discussed, and/or differences in perspective between the different raters involved. Nevertheless, it is also possible that the higher correlations often found between measures that use the same method are based on the method of measurement rather than the variable the investigators claim to be measuring.

Common method variance has been a concern to researchers for more than half a century (Campbell & Fiske, 1959). Method bias is potentially relevant to psychological research at several levels. In terms of the discussion so far, it is possible to view self-report as one measurement method and trained observer ratings of an interview, for example, as a different method. In that case, common method variance might conceivably artificially inflate the correlations between two self-report measures, simply because they were both self-report measures. However, method can also be conceived at a more fine-grained level. Within all self-report measures, two measures might be more likely to be correlated because both use Likert scales as the response format, where they might be less correlated with another self-report scale which used a forced choice format, simply because of differences in measurement method. The same might be true at the item level, for positively and negatively worded items, for example. Opinion regarding the extent to which such factors are a problem varies considerably.

While some consider common method bias to be a myth, or at least overstated (Spector, 2006) there is a considerable body of evidence to suggest that common method variance exists and is, at least at times, problematic (Podsakoff, MacKenzie, & Podsakoff, 2012). One source of evidence that common method bias may not be overstated is factor analyses of multi-trait multi-method studies. It is well known that measures with different measurement modes or sources often yield markedly differing results (cf. Monti , Wallander , Ahern , Abrams , & Munroe 1983).

A meta-analysis which used structural equation modelling to examine all multi-trait, multi-method studies published in six journals over a period of twelve years, concluded that 32% of the variance was due to common methods variance, resulting in a level of bias, in terms of the constructs purportedly measured, of the order of 26% (Doty & Glick, 1998).Meta-analytic studies of multi-trait multi-method studies have indicated multiple levels of potential method variance biases, particularly within self-report instruments. These include issues related to the

wording of questions, position of questions within the scale and response format, among others (Scherpenzeel & Saris, 1997).

Method, then, has three major components: the technical means of collecting the data, the source of the data, and the means by which the raw data is converted into the data which is analysed. The technical means of collecting the data may be questionnaire, interview or technological monitoring. Each of those categories can be divided into sub-categories, such as the type of questions in the questionnaire, whether the interview is structured, unstructured or semi-structured, and the various specific types of technological monitoring. The source of the data may be the client, the therapist, or a third party. The data may be transformed into the final scores in the process of collecting it, as in a brief questionnaire consisting of questions with Likert scale answers given numerical values, the answers to which are the data to be analysed. On the other hand, it may consist of free flowing text, whether in written form or in the form of recordings of interviews, which must then be transformed into data by some process of rating or analysis. All of these variations can be considered to constitute different methods. Method can also be taken to include the characteristics of the person conducting the interview or administering the procedure, features of the setting and even the means of recruiting people to participate in undertaking the particular assessment (Podsakoff, et al., 2012).

2.7.1 Remedies for Method Bias

2.7.1.1 Avoiding shared method between predictor and criterion variables

Since the greatest concern surrounding possible effects of method variance is the potential production of an artificially inflated correlation between predictor and criterion variables, leading to a Type I error, the simplest and most obvious method of avoiding this is to ensure that predictor and criterion variables do not share the same method. Thus, according to proponents of this solution to the method bias problem, if the criterion variable is to be

collected using a self-report measure, for example, it might be advisable to use predictor variables based on interview data or observer ratings. This solution has been termed the "distinct sources approach" (Kammeyer-Mueller, Steel, & Rubenstein, 2010).

However, the distinct sources approach has significant potential drawbacks. Whereas single source, or common method, designs run grave risks of producing Type I error, it is arguable that distinct source designs run equally grave risks of producing Type II error. This has been argued both on theoretical grounds and on the basis of simulation studies (Kammeyer-Mueller, et al., 2010).

2.7.1.2 Using multiple data sources

Using multiple sources for measurement of both the predictor and criterion variables avoids the difficulties of both the single source and distinct source approaches, and therefore the associated risks of Type I and Type II error discussed above (Kammeyer-Mueller, et al., 2010). The main drawbacks of this approach are that it is potentially costly and time consuming, often impractical, and may also place an unacceptable burden on the participants in studies, resulting in dropout or recruitment failure, and consequent lack of power owing to insufficient numbers.

2.7.1.3 Separating predictor and criterion variables in time, position or mindset

The idea of separating predictor and criterion variables in time, position or mindset is based on the assumption that much of the bias involved in common method variance is connected with proximity. If, for example, both the criterion and predictor variables are being collected by self-report from the same individual, common method bias is more likely if they are collected at the same time, in questionnaires administered adjacently. This is because the mindset operating when the first questionnaire is completed is likely to be carried over to the second questionnaire. From this point of view, the solution is to collect the variables on separate occasions, so that the contents of short-term memory at the time of the first

questionnaire have dissipated before the second questionnaire is completed. This is separation in time. Separation in position refers to the position of items within questionnaires and aims to reduce method effects by increasing the distance between items intended to measure the same construct, in order to reduce retrieval cues which might lead to contamination of the response to one item by the response to the preceding item. Separation of mindset refers to stories or scenarios used by the investigator to induce a different mindset in the participant. An example of this would be an investigator telling the participant that two separate studies were being conducted and that one questionnaire was part of one study and another questionnaire was part of another study, in order to reduce the likelihood of the second questionnaire being answered with the same mindset as the first. Aside from the potential ethical questions involved, there is little empirical support for this type of procedure, and it is difficult to conceive how such empirical support could be easily produced (Podsakoff, et al., 2012).

2.7.1.4 Methods for reducing within-measure method issues for self-report measures

Many methods for reducing the type of method bias related to shared method variance between the items in questionnaires have been put forward. These include: varying scale type within the self-report measure, by switching back and forth between scales types, such as Likert, Thurstone, Guttman, and Guilford scale formats; balancing positively worded and negatively worded items within the questionnaire; and a variety of methods for controlling for, or attempting to reduce the social desirability factor in the wording of questions.

2.7.1.5 Statistical means of attempting to correct for method bias

A number of statistical remedies, such as unmeasured latent method factor technique, correlation-based marker variable technique, regression-based marker variable technique, instrumental variable technique, CFA marker technique, directly measured latent method factor technique and measured response style technique have been proposed for correcting for

method bias, each with its own advantages and disadvantages (Podsakoff, et al., 2012). These will not be treated in detail here, but generally involve adding additional variables into questionnaire measures, with a view to measuring the extent of hypothesised method variance and accounting for it statistically. This is similar to the concept of adding a "lie scale" or social desirability scale to measures like the Minnesota Multiphasic Personality Inventory (MMPI).

2.8 Method variance versus different underlying constructs

The discussion above treats method variance as a source of error and makes the assumption that differing measurement methods are differently inaccurate methods of measuring a single underlying characteristic or latent variable. This contrasts with the earlier discussion of implicit and explicit measures, which implied the possibility that, at least to some extent, different measurement methods might tap information stored in different systems, as exemplified by the distinction between declarative and implicit memory, or conscious and unconscious processes. Knowing, at the theoretical level, what one is attempting to measure is of key importance in navigating this distinction.

2.9 Practical means of measuring therapist effectiveness

Irrespective of the means of measurement, it is clear that measurement of therapist effectiveness depends on some form of outcome measurement. Arguably, the effectiveness of therapy for an individual client is best demonstrated by improved scores on an outcome measure of some description (Hill & Lambert, 2004). The outcome for each individual client will depend on multiple factors, including client factors, such as the type of issue or problem for which therapy is sought, the level of motivation and psychological awareness of the client, the personality of the client, and so forth; therapist factors, which will be discussed at length later in this document; interpersonal factors, such as the degree of fit between the

client and the therapist; and circumstantial factors, such as the many random happenings that are likely to occur in the client's life outside of therapy.

Clearly the contribution of the therapist, however small, is best assessed by combining data from multiple clients. For each therapist, some clients will do well and others poorly, but with sufficient data it should be possible to construct an equation that would predict the most likely course for an average client of a particular therapist. The slope of that equation is then an indicator of therapist effectiveness. This is the approach that has been taken in the literature reviewed earlier that indicates the existence of differences in therapist effectiveness. The primary question of interest in the current investigation is the factors that might enable one to predict that slope.

2.10 Summary

There is a considerable body of evidence suggesting that some therapists are more effective than others, when effectiveness is defined in terms of change in self-report outcome measures. There is some doubt about whether the use of self-report outcome measure is the best way of measuring therapist effectiveness, but it is nevertheless the most common way of doing so in practice. It is clear that there is a potential for issues of shared method variance to reduce the clarity of findings in studies which use self-report methods for all phases of the study. However, there are also possible ways of reducing any bias introduced. In the final analysis, whatever consensus there may be regarding differences in the effectiveness of psychotherapists, there is no real consensus regarding the explanation of the differences in effectiveness that have been demonstrated. The next two chapters explore in depth some of the explanations that have been put forward in the past. Chapter 4 also explores the relationship between some of those explanations and the concepts of attachment and reflective functioning that are central to this investigation.

CHAPTER 3

THERAPIST FACTORS IN PSYCHOTHERAPY

3.1 Overview and purpose of the chapter

This chapter explores the role of therapists in relation to factors thought to make for effective psychotherapy. After briefly reviewing evidence for the efficacy of psychotherapy, it examines the debate about the role of so called specific factors and common factors in the effects of psychotherapy. In relation to specific factors, it explores the concepts of adherence and competence, and examines research into how these might relate to outcome. In terms of common factors, it examines the therapist contribution to the alliance, and provides an introduction to factors originating in the client-centred therapy tradition, which are explored in greater detail in the following chapter.

3.2 The effectiveness of psychotherapy

Psychotherapy has clearly been shown to be an effective treatment for a wide range of disorders (Lambert, 2013; Wampold, 2007). This finding applies both to randomized controlled studies and to "real world" situations. Psychotherapy is more efficacious than placebo. Furthermore, psychotherapy for depression has been found to have long-term results superior to medications. Psychotherapy has, in fact, been found to be more effective for mental disorders than many accepted medical treatments are for physical disorders, "including almost all interventions in cardiology (e.g., beta-blockers, angioplasty), geriatric medicine (e.g., calcium andalendronate sodium for osteoporosis), and asthma (e.g., budesonide); influenza vaccine; and cataract surgery, among other treatments" (Wampold, 2007, p. 865).

3.3 Common factors versus specific factors

Although it is generally accepted that psychotherapy is effective, there is debate regarding the mechanisms accounting for its effects. In particular, there is a division between the view that techniques specific to certain therapies are responsible for their effects and the view that common factors involved in all psychotherapies are mainly responsible for the efficacy of psychotherapy. The so-called "dodo bird effect" – the fact that current research suggests that most different psychotherapies, despite widely varying rationales and techniques, achieve similar results – has provided impetus for greater recent emphasis on the common factors view, which was first proposed by Rosenzweig (1936). Despite this growing trend, however, the continued proliferation of randomized controlled trials (RCTs) suggests a continued interest in the specific technique hypothesis.

3.4 The therapist and specific factors: adherence and competence

Specific factors in therapy are the core techniques or methods specified by a particular theory of psychotherapy (Castonguay & Holtforth, 2005). With the advent of manualized therapies, measuring the extent to which therapists adhere to the techniques specified in the manual has become important and measures for testing this for a particular therapy type have been developed. In addition to the desire to know the extent to which the therapist adheres to the specified techniques, researchers have also wanted to assess the degree of competence with which the techniques were delivered. Thus, measures of competence have also been developed. Related to the concept of competence is the concept of expertise, which has recently undergone some exploration within the field of family therapy (Holmes, 2009; Laitila, 2009).

In view of these developments, it would make sense to investigate to what extent adherence to particular therapy techniques and competence in the application of those techniques contributes to therapist effectiveness. Given the amount of effort expended in

training therapists to competently apply particular techniques, it seems reasonable to expect that more effective therapists would be better in some way at implementing those techniques. This possibility has been investigated in at least one meta-analysis. Webb (2012) conducted a meta-analysis of 36 studies which related adherence and competence to outcome. He found that the effect sizes for both the adherence-outcome relationship and the competence-outcome relationship were not significantly different from zero. The effect size for adherence was 0.02 and for competence it was 0.07. This suggests that, contrary to the expectations of those conducting RCTs, adherence and competence may not play a significant role in psychotherapeutic effectiveness. However, the heterogeneity of results in adherence and competence studies, in conjunction with the possibility of quadratic effects that have not been fully investigated, may mean that more evidence is required before such a conclusion is fully warranted (Baldwin & Imel, 2013). Nevertheless, it would be difficult at the present time to make a case for the relevance of adherence or competence in the therapeutic technique as a contributor to therapist effectiveness.

3.5 The therapist and common factors: contributions to the alliance

The concept of common factors covers many potential variables. One way of categorising the variables has been to divide them into support factors, learning factors, and action factors (Lambert, 2013). Support factors include the relationship and alliance, the safe environment, reassurance, warmth, trust and acceptance. Learning factors include such things as corrective emotional experiences, insight, reframing, and assimilating problematic experiences. Action factors include cognitive mastery, facing fears, emotion regulation, reality testing and risking new actions. Clearly, the therapist could have a potential role in many of these factors.

Of the many common factors that have been proposed, probably the most studied, and as mentioned in the previous chapter, one of the most robust predictors of outcome is the

therapeutic alliance, (Baldwin, et al., 2007; Barber, et al., 2000, 2009; Martin, et al., 2000; Marziali & Alexander, 1991; Meyer, et al., 2002). A recent meta-analysis of therapist contributions to the alliance found that, on average, the proportion of variance in the alliance attributable to therapist factors was around 9% (Baldwin & Imel, 2013). What is not clear, however, is what it is that therapists do which contributes to the alliance. Nor is it clear what factors within the therapist enable the therapist to do whatever it is that they do that facilitates the alliance. Another much studied area of therapist contribution to common factors is the provision of unconditional positive regard, empathy and congruence on the part of the therapist. These Rogerian factors will be discussed in more detail in a subsequent chapter.

3.6 Summary

Psychotherapy is clearly an effective means of addressing psychological disorder. Opinion regarding the mechanisms contributing to this effectiveness has been divided between those believing this effectiveness to be due to the specific, theory-based interventions specified by the various schools of psychotherapy, and those who have argued that common factors across therapies are more likely responsible. Thus far, the evidence seems more supportive of the common factors argument. This makes it appear most likely that differences in therapist effectiveness are due to therapist ability to provide elements of proposed common factors rather than being due to differences in technical competence or adherence.

CHAPTER 4

PREVIOUS INVESTIGATIONS OF THERAPIST EFFECTIVENESS

4.1 Overview and purpose of the chapter

This chapter examines previous research that attempts to explain or understand differences in therapist effectiveness, other than the research into adherence and competence already discussed in Chapter 3. It begins by looking at factors that have been thought promising or intuitively obvious, but for which so far little or no supporting evidence has been found. The chapter then goes on to examine those factors for which supporting evidence does exist. In doing so, it explores some of the history of psychotherapy research, with a particular emphasis on the work of Carl Rogers who led a research program that focused heavily on factors contributing to therapist effectiveness. The chapter also examines ways in which the factors Rogers studies overlap with the concept of reflective functioning, which constitutes a major focus of the current study. This historical review examines not only what has been attempted and what has and has not been explained in the process, but the ways in which the concepts explored convergence on attachment theory. The chapter concludes by proposing that attachment theory may provide a suitable theoretical base from which to explain therapeutic effectiveness. Attachment theory is then treated in more depth in the chapter following.

4.2 Factors found not to be responsible for differences in therapist effectiveness

In a study of 149 therapists who saw 7,628 clients for a total of 64,103 sessions, mentioned in the last chapter under evidence for therapist effects, the outcome trajectory for therapists was found not to be related to any of the following: gender; type of training, which included clinical psychology, counselling psychology, social work, and marriage and family

therapy; number of years of training; nor theoretical orientation, which included cognitive–behavioural, humanistic, behavioural and psychodynamic (Okiishi, et al., 2006). Similarly, Brown, et al., (2005) found that "results could not be explained by case mix differences in diagnosis, age, sex, intake scores, prior outpatient treatment history, length of treatment, or therapist training/experience" (p. 513). Similar results have also been found in other studies (Beutler, et al., 2004). Beutler et al. (2004) categorised the variables that had been investigated according to whether they were states or traits, and whether they were observed or inferred. They noted that observed traits (e.g. gender and sex), observed states (e.g. experience and training), inferred traits (e.g. attitudes and values) had not been found to be associated with therapist effectiveness. While it is possible that some future study will find significant effects for one or more of these variables, on the basis of evidence to date, it seems unlikely that such effects would be very significant. The only category which Beutler et al. found to have any suggestion of connection with therapist effectiveness was inferred states (e.g the therapist contribution to the therapeutic relationship).

4.3 Training might sometimes be detrimental

As mentioned previously, numerous studies have found that the number of years of training seems not to be relevant to therapist effectiveness. Furthermore, there is a reasonable body of evidence suggesting that professional training may even be detrimental to therapist effectiveness (Christensen & Jacobson, 1994), in that paraprofessional counsellors have frequently been found to be as effective or more effective than therapists with professional training. While this finding is controversial, Faust and Zlotnick (1995) in examining major criticisms of studies supporting this view found no evidence of systematic bias, and concluded that "despite common beliefs to the contrary, the finding that formal training does not predict successful therapy appears sound" (p 157). A few years later, an extensive review of previous studies concluded that the following tentative conclusions were warranted: that it

has been repeatedly demonstrated that paraprofessionals have the capacity to facilitate therapeutic change in clients, even when the paraprofessionals have received no specific training; that brief training allows people with no psychotherapeutic training who have other experience in working with a particular group to acquire specific therapeutic skills; that professional therapists possibly retain clients longer, and also conduct therapies with greater impact and more enduring effects; and finally that "there is some evidence that therapists with specialty training may work more quickly with their clients, and their clients may have lower rates of relapse" (Atkins & Christensen, 2001).

Although a recent meta-analysis of five studies concludes that no conclusions can be drawn about the relative efficacy of professionals and paraprofessionals (den Boer, Wiersma, Russo, & van den Bosch, 2005), it also notes that in three of the reviewed studies, paraprofessionals were found to be superior to professionals. A recent study of outcomes at a university counselling centre found, amongst other things, that better outcomes were achieved by inexperienced interns than by experienced psychology staff (Minami, et al., 2009). This study did note, however, the likelihood that there were differences in case complexity between the cases of the two groups, although this assertion was not borne out by the average initial OQ-45 scores reported in the study.

Further support for the idea that training might potentially be detrimental comes from one of the studies into the effectiveness of psychotherapists which demonstrated distinct differences between individual therapists (Okiishi, 2000). Although this study concluded, when looking at the whole sample, that level of therapist training had no effect on therapist effectiveness, one section of the study divided the sample by initial severity, based on OQ-45 score. This sub-section of the study found that therapists were not significantly different from one another in their effectiveness with mildly disturbed clients. Nor were they significantly different in their effectiveness with severely disturbed clients. The significant differences in therapist effectiveness occurred with moderately disturbed clients. Furthermore, when only

moderately disturbed clients were included in the analysis, therapist training did make a small but significant difference ($p<0.05$), and the direction of the difference was that more training correlated with less effectiveness.

On the other hand, a recent study comparing the effectiveness of volunteer counsellors with no prior training to volunteer counsellors with certificate level training in counselling skills found those with the training performed significantly better than those without (Armstrong, 2010). It is worth noting that both groups of counsellors in this study would have been counted as paraprofessionals in the previously mentioned studies. This raises the question of whether there are components of many professional training courses that promote ways of thinking or operating that inhibit factors responsible for therapist effectiveness, and whether those components are perhaps not related to the teaching of counselling skills. For example, it might be that, whereas training in counselling skills promotes efficacy, training in the assessment of psychopathology might retard clinical efficacy. "The focus on DSM diagnostic disorders... constrains how we think about and the kinds of questions we ask about, clinical problems... With diagnostic categories being the focus of our outcome research, little concern is given to the unique determinants/dynamics that may be relevant to our interventions" (Goldfried & Wolfe, 1998, p. p145). This quote brings to mind the earlier words of Carl Rogers: "If I accept the other person as something fixed, already diagnosed and classified, already shaped by his past, then I am doing my part to confirm this limited hypothesis. If I accept him as a process of becoming, then I am doing what I can to confirm or make real his potentialities" (Rogers, 1961/1995, p. 55).

In addition, there is some evidence to suggest that training in adherence to specific clinical protocols via manualized therapy can have negative impacts on therapist attitudes and behaviours. For example, following 12 months of manualized training in time-limited dynamic psychotherapy, with successful adherence outcomes, therapists were found to have become twice as active in session, and to deliver messages containing embedded criticisms of

the client with significantly greater frequency. Increases in therapist messages rated as hostile and in therapist authoritarianism, decreases in therapist warmth, friendliness, optimism and supportiveness were also noted (Henry, Strupp, Butler, Schacht, & Binder, 1993). Similarly, a manualized study of cognitive therapy found that, although therapists adhered to the protocol, there was a negative correlation between focus on distorted cognitions and therapeutic outcome. It was suggested that this was mediated by damage to the therapeutic alliance as a result of a focus on the therapist's agenda, as dictated by the manual, irrespective of the wishes and concerns of the patient. Furthermore, it was found that, where therapists became aware that the alliance was suffering, they attempted to fix the problem by increasing their focus on cognitive techniques, thus further impairing the alliance (Castonguay, Goldfried, Wiser, Raue, & Hayes, 1996). It is probable that the elements involved in manualized therapy that lead to such results may also be present in some of our efforts to train students in specific therapy interventions during postgraduate training courses.

An Australian naturalistic study which compared post-graduate clinical psychology students with intern psychologists who chose the apprenticeship model rather than postgraduate study found that those undertaking postgraduate study in clinical psychology had significantly better knowledge about diagnosis, assessment and treatment planning, but were not significantly better in terms of working alliance or client-rated empathy (O'Donovan, Bain, & Dyck, 2005). While it is reassuring that this study did not find any worsening of clinical interpersonal qualities as a result of training, it is of concern that it did not establish any significant improvement in the area as a result of training. Nevertheless, an additional analysis of data from the study did find improvement in clinical interactions following postgraduate training for a small subset of students, those who initially showed signs of mild emotional disturbance on self-report measures (O'Donovan & Dyck, 2005). Whereas this subset of students initially performed less well clinically than their peers, they performed at the same level as their peers after training. Emotional disturbance was not

measured as a post-test, so it was unclear whether the postgraduate training reduced the emotional disturbance, or whether it moderated the effect of the emotional disturbance on clinical practice. The study, which used standardised clients (actors who play the part of a client) rather than "real" clients, did not assess outcomes, efficiency or effectiveness.

Another potentially problematic aspect of postgraduate training in clinical psychology might be the arguably greater emphasis on research rather than clinical practice involved in many postgraduate psychology courses. Postgraduate students often report perceiving too great an emphasis on research, to the detriment of clinical development (O'Donovan, Dyck, & Bain, 2001). Such an emphasis might tend to develop student attitudes inimical to the therapeutic alliance. For example, whereas research requires detachment, the privileging of cognition over emotion, and the objectification of experimental subjects and their characteristics, the therapeutic alliance requires warmth, the ability to enter into another person's subjectivity, and an attunement to the nuances of emotion.

If the somewhat confusing results reported in the literature regarding the effects of training on therapist effectiveness do, indeed, stem from the interaction of the contradictory effects of different aspects of many programs of training, the question arises as to whether it is possible to design training which maximises the effectiveness enhancing aspects. It would be necessary to identify the specific elements of training that promote therapist effectiveness and the specific elements which reduce therapist effectiveness. If this could be done, and training programs designed which maximized the enhancing elements and minimized the detrimental elements, a significant step would have been taken in improving the quality of the therapists of the future.

4.4 Therapist effectiveness and Rogers' "Significant Omissions"

In his 1957 paper regarding the necessary and sufficient conditions for therapeutic personality change, Carl Rogers included a section headed "Significant Omissions" in which

he explored some of the factors that he thought others might expect to find mentioned, which he thought were irrelevant. These included the following: type of client, type of therapy, intellectual or professional knowledge on the part of the therapist, and the existence of, or accuracy of, a diagnosis.

In terms of the discussion in the preceding section, Rogers' contention that intellectual or professional knowledge is irrelevant strikes a chord. Rogers stated "Intellectual training and the acquiring of information has, I believe, many valuable results— but becoming a therapist is not one of those results" (Rogers, 1957/2007). To the extent that our training programs focus on knowledge and information, it might well be that they are distracting future therapists and focussing their attention on irrelevancies. Moreover, the considerable emphasis placed on learning, understanding and acquiring expertise in the assessment of diagnosis during training would be a further such distraction.

Rogers' other "omissions" all clearly argue for what is now called a "Common Factors" model. In arguing this, Rogers is stressing the importance of essentially human and relational qualities in the therapist. Therefore, from a Rogerian viewpoint, it is perhaps not surprising that case mix, diagnosis, age, sex, intake assessment, prior treatment history, length of treatment and therapist training have been subsequently been found to have apparent irrelevance with regard to therapist effectiveness. This might well be taken as support for hypotheses put forward more than half a century ago.

4.5 Factors which might affect therapist effectiveness

4.5.1 Facilitative interpersonal skills (FIS).

Effective therapists have been said to be "characterized by their sensitivity to patient's dysphoria and hold non-defensive attitudes that allow them to focus on the therapeutic relationship and directly approach areas of resistance and defense" (Beutler, 1983, p. 28). In two of the relatively few successful recent studies into factors that contribute to effective

therapists, Facilitative Interpersonal Skills (FIS) have been found to be predictive of therapist effectiveness (Anderson, 2001; Anderson, Ogles, Patterson, Lambert, & Vermeersch, 2009). FIS are defined as consisting of a combination of verbal fluency, emotional expression, persuasiveness, hopefulness, warmth, empathy, alliance-bond capacity, and problem focus, and were measured in these studies using a computer-simulated situation in which difficult client situations were presented in the form of video footage, with gaps for therapist intervention, and therapist responses were audio recorded. Therapist responses were then rated by a panel trained in rating the aforementioned variables. FIS scores from this simulated situation were found to be significantly correlated with therapist client-outcome slopes in actual therapy sessions with real clients, as measured using the OQ-45, rated at each session. However, it is not clear to what extent the effect on outcome in these studies is, or is not, mediated by the therapeutic alliance. Conceptually, FIS seems to have elements of the therapeutic alliance combined with a strong component of the factors that Carl Rogers considered necessary and sufficient for therapeutic change.

4.5.2 The Rogerian triad

More than half a century ago, Carl Rogers and his associates identified a number of therapist factors which were thought to contribute to therapeutic efficacy, as was briefly mentioned earlier in this paper. These factors were genuineness or self-congruence, warmth or positive regard, and accurate empathic understanding. These therapist factors were conditions 3, 4 and 5 of the six necessary and sufficient conditions Rogers proposed. The other conditions he proposed pertained to the client or the relationship, rather than the therapist per se (Rogers, 1957/2007). Rogers and his colleagues also developed instruments for measuring the factors of empathy, congruence and positive regard, and developed courses for training therapists in developing these attributes (Carkhuff & Truax, 1965). One of the

Rogerian factors, empathy, is a significant component of the concept of reflective functioning to be explored in this paper, as was mentioned in Chapter 1.

Rogers had begun using a wire recorder to make audio recordings of his counselling sessions as early as 1938 (Farson, 1975). Although the wire recorder was invented in the late 1890s, it did not come into common use until 1946, after two American companies designed some technical improvements that made it more practical and less expensive. Nevertheless, Rogers managed to use a primitive wire recorder to make audio recordings of sessions from 1938 onward. In the 1940s, recording interviews became standard practice for Rogers and his colleagues, after the installation of equipment that recorded sound onto phonograph records, at Ohio State University (Rogers, 1942b). These sessions were transcribed, analysed and, in some cases, published. The analysis included categorising both therapist and client statements. For the therapist, categories used included: clarification of feeling; simple acceptance; nondirective leads; direct questions; approval and encouragement; restatement of content; interpretation; structuring; discussing ending of contact; information; using persuasion; friendly discussion; ending of treatment; suggesting topics; using criticism; and unclassifiable. For clients, categories used included: statement of problem; understanding and insight; accepting counsellor's statement; rejecting counsellor's statement; not related to the problem; discussion of plans; asking for information; answer to question; ending of contact; friendly discussion; ending of treatment; and unclassifiable (Snyder, 1947). The transcripts were also examined in terms of temporal linkages between classes of statements. For example, nondirective leads by the counsellor were found to be commonly followed by expressions of problems by the client. Simple acceptance by the counsellor was often found to be followed by expressions of understanding and insight on the client's part (Barrett-Lennard, 1998).

The first wave of studies of the Rogerian facilitative conditions tended to emphasise the use of ratings of recorded audio from therapy sessions by trained judges (Truax, 1963). Using

the Accurate Empathy Scale (Truax, 1961), judges rated the therapist's sensitivity to, and ability to communicate in an attuned way, their understanding of patients' feelings. Raters were trained to rate not only verbal content, but also non-verbal aspects of the therapist's intonation and voice quality. Raters were blind regarding whether the tape-recorded excerpt to which they were listening was from early in therapy or late in therapy, as well as to whether it was from a good or poor outcome case. Four patients who had a positive outcome as determined by "a battery of psychological tests" were compared with four patients who demonstrated poor outcome on the same assessment. It was reported at the time that such ratings were predictive of positive outcome (Truax, 1963). However, those findings have since been criticised, on several grounds. The validity and reliability of the Accurate Empathy Scale have been criticised and it has been suggested that the scale measures some global therapist factor other than empathy (Chinsky & Rappaport, 1970).

As part of the ongoing controversy around the question of what the Accurate Empathy Scale actually measures, two studies analysed a number of therapist linguistic variables in transcripts and compared them to accurate empathy ratings of the same transcripts. One study used transcripts of psychoanalytic therapy and the other used transcripts of client-centred counselling. Although the findings of the two studies were marginally different, both studies found that therapists who spoke more about the client's feelings were rated as having higher accurate empathy (Wenegrat, 1974, 1976). Whether this indicates that the scale measures what it purports to measure or not is a matter of interpretation. To complicate matters further, a later replication of the Truax study found that accurate empathy was predictive of global ratings by both therapist and client of the success of therapy post termination, but not of changes in client ratings of symptoms or level of discomfort (Truax, et al., 1966).

It is well known that client ratings of therapist empathy are better predictors of outcome than therapist or observer ratings (Gurman, 1977). This may be because of method variance, as discussed earlier, since outcome is most commonly measured by comparison of client self-

report. The alternative explanation is that it is because of the sixth of Rogers' necessary and sufficient conditions, which was that the client perceives the empathy offered by the therapist (Rogers, 1957/2007). One elegant early study which found a significant effect of therapist empathy on outcome, however, adopted a measure of therapist empathy based on a combination and comparison of client and therapist perspectives. This study had clients initially complete Kelly's Role Construct Repertory Grid (Kelly, 1955) in order to indicate constructs which were relevant to them personally, in regards to the relationships in their lives. The first ten constructs were then arranged as five-point rating scales on a new, individualised measure for each client. Both the clients and the therapists were asked to rate how the client saw themselves after the second session of therapy, and again at the end of therapy. The squared differences between the therapists' ratings and the client's ratings were used as the measure of empathy, wherein lower scores, representing greater similarity, were taken as indicative of higher therapist empathy. Successful cases were distinguished by greater therapist empathy at the end of therapy (Cartwright & Lerner, 1963). However, since the study used therapist ratings of client functioning as the outcome measure, it is not directly comparable with the majority of recent studies of therapist effectiveness.

The approach to measuring empathy used in the study described above has been extended over the last twenty years into a measurement approach that has become known under the name "empathic accuracy" (Ickes, 1993; Ickes, 2009). While this approach involves several variations on a theme, the most representative and most relevant to the study of empathy in relation to psychotherapy is the model used by Marangoni, which involved the preparation of videos of three interviews, each involving a woman discussing an issue of emotional significance. Immediately after the interviews, the videos were played back to the women interviewed, and they were asked to pause the video at each point where they remembered thinking or feeling something, and note down what they were thinking or feeling together with the video time-point at which they had the experience. These videos were then

used as the tools for measuring empathic accuracy in other individuals, who were shown the videos, which were paused at the points where the interviewees had paused them, and the respondents were asked what they thought the interviewee was thinking or feeling at that point. The responses given were then compared with the thoughts and feelings originally described by the interviewee, in terms of similarity or difference. The ratings of similarity and difference were made by trained raters. After watching the videos, the respondents were also asked to complete a questionnaire in which they were asked how accurate they thought they had been in their responses. The use of three different interviewees meant that it was possible to get an idea of the extent to which empathic accuracy was a characteristic of the responder versus the extent to which it varied from one target to another. Respondents were found to be fairly consistent across targets ($\alpha = .86$), leading the investigators to conclude that empathic accuracy is a relatively stable individual trait. The respondents' self-report assessment of their own accuracy had no significant correlation with their measured accuracy. A second phase of the assessment explored whether giving respondents feedback about the accuracy of their responses would enable them to improve their accuracy. It did improve their accuracy, but did not improve the accuracy of their self-perception (Marangoni, Ickes, Garcia, & Teng, 1995; Marangoni, 1989).

Since the study described above, the empathic accuracy paradigm has spawned a plethora of other studies (David, Philinda, Heather, Howard, & et al., 2005; Hall & Schmid Mast, 2007; Ickes, 2009; Ickes, et al., 2000; Sabbagh, 2005; Zaki, Bolger, & Ochsner, 2008). Among the areas studied have been couple interactions, parents and children, borderline personality disorder and autism. Unfortunately, however, there appear not to have been any studies of the psychotherapy process using this paradigm.

A recent meta-analysis, which considered 59 independent samples that included a total of 3599 clients, concluded that "empathy is a moderately strong predictor of therapy outcome: mean weighted r=.31 ($p < .001$; 95% confidence interval: .28 –.34)"(Elliott, Bohart,

Watson, & Greenberg, 2011). Another meta-analysis investigating positive regard, which involved 18 independent samples, covering 1067 clients, concluded that "positive regard has a moderate association with psychotherapy outcomes"(Farber & Doolin, 2011). This meta-analysis found an aggregate effect size of r=.27 (p<.000). A recent meta-analysis of congruence/genuineness, which examined 16 studies involving 863 clients found a small to moderate effect for congruence, with an aggregate effect size of r=.24 (p=.003) and a confidence interval of .12 to .36 (Kolden, Klein, Wang, & Austin, 2011). These results are all significant, and comparable to the effect sizes found for psychotherapeutic treatments. Clearly, however, the empathy has the most impressive result. In examining these results, the task force for evidence-based therapy relationships has placed empathy in the "demonstrably effective" category, positive regard in the "probably effective" category and congruence/genuineness in the "promising" category (Norcross & Wampold, 2011).

Thus it seems that, more than 50 years later, the Rogerian conditions are still relevant, and that the most clearly relevant of those conditions is empathy. This is of considerable interest for the current study, given the conceptual overlap between empathy and reflective functioning. Empathy equates roughly to that portion of reflective functioning which is interpersonal rather than intrapersonal (Allen & Fonagy, 2006). Nevertheless, attempts to empirically explore the Rogerian conditions have not been without their problems. Those problems are explored in some detail below.

4.5.2.1 The problems involved in measuring the Rogerian conditions

4.5.2.1.1 Empathy

A 1996 review of empathy research identified several problems involved in the measurement of empathy, the most commonly measured of the Rogerian conditions. These include problems at the theoretical level around lack of clarity in the specification of the concept and problems at the methodological level (Duan & Hill, 1996).

At the theoretical level, empathy has sometimes been conceptualised as a trait, at other times as a state, and at other times as a stage in a process. At times, Empathy has been conceptualised as a mainly cognitive activity. At other times, it has been conceptualised as a mainly affective activity. Often, it has been conceptualised as a combination of both. Empathy has also been conceptualised at times as a mainly internal activity and at other times as a combination of internal and external activities. Measures based on different combinations of these theoretical factors are clearly not compatible or equivalent.

More recently, interest in the neurological basis of empathy has emerged, stimulated in large part by the discovery of mirror neurons in macaque monkeys (di Pellegrino, Fadiga, Fogassi, Gallese, & Rizzolatti, 1992). Although it was soon argued that this might be the basis of human empathy (Preston & de Waal, 2002), it has subsequently been concluded that there is little evidence to support a role for mirror neurons in human empathy (Decety, 2010). Empathy is now thought to be associated with "complicated and distributed brain networks including the posterior superior temporal sulcus, amygdala, insula, medial and ventral prefrontal cortices" (Decety, 2010, p. 206). There is thought by some to be a "growing consensus" that empathy is based on three neuroanatomically distinct processes: one associated with emotional simulation, possibly centred in the limbic system; one associated with perspective-taking, possibly involving areas in the pre-frontal and temporal cortex; and one associated with the regulation of emotion, possibly involving areas in the orbitofrontal, prefrontal, and right parietal cortex (Elliott, et al., 2011). However, this consensus should perhaps be treated with some caution, since research into the neurophysiology of complex cognitive-affective phenomena is known to be fraught with pitfalls: most notably the tendency to use simple and very artificial stimuli to approximate complex social situations; and reliance on extremely simple models that present great difficulties of interpretation in extrapolating from them to the complex social world we inhabit (Zaki & Ochsner, 2012).

At the methodological level, arguments have been presented as to why self-report is an inadequate methodology for assessing empathy. Arguments have also been presented as to why reports from third parties and/or trained expert ratings of interviews are also inadequate for assessing empathy. Duan and Hill (1996) conclude that there is an urgent need for clearly specified measures of both the cognitive and affective components of empathy. They recommend that measurement techniques from other areas of psychology be imported into the study of empathy, and suggest that indirect methods of assessing empathy may be preferable. They also recommend the development of further methods based on comparing the therapist's perceptions of the client's thoughts and feelings with the client's perceptions of their own thoughts and feelings.

As discussed earlier in this chapter, the empathic accuracy literature provides a method of measuring empathy that does not depend on self-report or other-report, thus bypassing many of the methodological problems that have plagued empathy studies (Ickes, 2009). However, while this method appears to do a good job of assessing the extent to which empathy is accurate, it makes no attempt to assess the extent to which empathy is received. It is perhaps for this reason that the method does not seem to have been applied in psychotherapy process research (Elliott, et al., 2011).

The empathic accuracy method does not appear to have been applied in psychotherapy process research. Nevertheless, one method which has been applied to psychotherapy research seems to have a lot in common with the empathic accuracy methodology. That method is interpersonal process recall (IPR: Kagan & Michigan State Univ, 1972; Spivack, 1974). Originally developed as a means of using technology to enhance training and therapy, IPR was later adapted for use in psychotherapy process research (Elliott & et al., 1982). IPR involves the videotaping of therapy sessions, following which the therapist, the client of both are asked to view the video recording and talk about what they were thinking, feeling or intending, moment by moment, in the recorded interaction. IPR has been used for several

research purposes, including exploring clients' reactions to therapist interventions (Elliott & et al., 1982; Hill, Helms, Spiegel, & Tichenor, 1988) and for exploring therapist perceptions of client reactions to therapist interventions (Thompson & Hill, 1991). The latter purpose comes very close to the sort of empathy measuring paradigm used in the empathic accuracy studies. Minor modifications of the approach used would enable the exploration of the accuracy of therapist empathy in the therapy session. Unfortunately, this does not seem to have been done.

4.5.2.1.2 Positive Regard or Warmth

A factor analytic study aimed at examining the extent to which positive regard differs from empathy, using the Carkhuff and Truax scales for rating recordings of therapy sessions found that both constructs related to two orthogonal underlying factors, but that neither construct related to a single factor. Rather, both constructs related to both factors (Zimmer & Anderson, 1968). This seems to suggest either a problem with the construct or a problem with the Carkhuff and Truax scales for measuring it. .

4.5.2.1.3 Congruence

Ratings of transcripts or recordings for congruence or genuineness are known to be the least reliable of any ratings of the facilitative conditions (Lambert, DeJulio, & Stein, 1978). This may be due, at least in part, to confusion around the concept and/or to misspecification of the scales. It has been suggested that rather than genuineness, it might be better to use terms like lack of phoniness (Patterson, 1985).

Rogers used the word congruence in more than one way. In the first place, although he more often used it to describe a state, and usually defined it as describing a state, he also sometimes treated the word as if describing something more like a trait. The focus on state is probably related to Rogers' focus on experience. The following quote, from one of his definitions of incongruence, contains elements of both meanings:

> Thus the individual may perceive himself as having characteristics a, b and c and experiencing feelings x, y and z. An accurate symbolization of his experience would, however, indicate characteristics c, d and e, and feelings v, w and x. When such a discrepancy exists, the state is one of incongruence between self and experience (Rogers, 1959, p. 203).

In the quote above, incongruence is defined as a state, and the phase "experiencing feelings x, y and z." is talking about a state, yet we also have discussion of "having characteristics a, b and c" which is talking about a trait. Thus, within the one definition, it would seem, Rogers is defining incongruence as both a state and a trait.

To make matters more complicated, it has been argued that Rogers described congruence in several different ways that imply different meanings (Bozarth & Wang, 2008; Cornelius-White, 2007a, 2007b). One meaning is genuineness, being real or non-phony. Another meaning has to do with the level of consistency between the self and experience. Another meaning has to do with relational transparency or authenticity. Another meaning has to do with wholeness of the person, psychological adjustment or maturity. For example, "Maturity is a broader term describing the personality characteristics and behavior of a person who is, in general, congruent" (Rogers, 1959, p. 207), or "Congruence equals psychological adjustment" (p. 232), This latter meaning also clearly has more of a trait than a state focus.

As a trait, it could be argued that congruence has much in common with the concept of attachment security. As mentioned earlier, the main measure of attachment security in the Adult Attachment Interview is narrative coherence, which is the extent to which the narrative hangs together without contradictions and discrepancies (Crowell, et al., 1996; Waters, Rodrigues, & Ridgeway, 1998; Waters & Waters, 2006). This is arguably also the extent to which the person narrating is congruent, in the sense of having a consistency between their self-concept and their experience.

Congruence was considered by Rogers to be possibly the most important of the facilitative conditions (Rogers, 1961). Given that, the confusion over the specification of the concept, together with the lack of specificity of the measures most used during the heyday of research into the Rogerian conditions has undoubtedly put something of a stumbling block in the way of progress in the area of such research.

4.5.2.2 Recent studies relating variants of the Rogerian facilitative conditions to outcome

4.5.2.2.1 Facilitative Interpersonal Skills

Facilitative Interpersonal Skills (FIS), seen as an extension of the Rogerian facilitative conditions (Anderson, Ogles, & Weis, 1999), were discussed earlier in this chapter. FIS are defined as consisting of a combination of verbal fluency, emotional expression, persuasiveness, hopefulness, warmth, empathy, alliance-bond capacity, and problem focus (Anderson, 2001). As mentioned earlier, Facilitative Interpersonal Skills (FIS) have been found to be predictive of therapist effectiveness in two recent studies (Anderson, 2001; Anderson, et al., 2009).

4.5.2.2.2 Goal-corrected empathic attunement.

An analogue study of the role of empathic attunement in the process of counselling by psychotherapy students (McCluskey, 2005) found, amongst other things, that goal-corrected empathic attunement in counselling sessions was correlated with secure attachment in the student. Goal-corrected empathic attunement was also correlated with ratings of the process by those playing the part of client. Interestingly, this study also found that empathic attunement could be improved by training. In addition, this study found correlations between therapist attachment style and ratings of the therapeutic process (Christensen & Jacobson, 1994). Nevertheless, the analogue nature of this study limits the conclusions that can be

drawn from it, and also means that it cannot be considered to involve a measure of therapist effectiveness.

4.5.2.2.3 The Real Relationship

Rogers' concept of congruence has been extended and given a more relational flavour in recent years via the concept of the real relationship (Gelso & Carter, 1985; Gelso & Carter, 1994; Greenson & Wexler, 1969). Gelso comes to the real relationship concept from a psychoanalytic perspective, but acknowledges the contribution of Rogers to the concept (Gelso, 2011a). Gelso's real relationship concept involves two elements: genuineness and realism. Gelso sees the genuineness element as being essentially the same as Rogers' concept of congruence. The realism aspect, which is about how accurately one person perceives the other (Gelso, 2011c), would seem to be very much the same as empathic accuracy. Strangely, while Gelso equates genuineness to congruence, he apparently believes that realism has no place in Rogers' thought (Gelso, 2011a). This is because Gelso sees Rogers as a constructivist who doesn't believe in any form of reality. However, Rogers is generally classified as a phenomenologist rather than a constructivist, and phenomenology was a relatively late addition to the viewpoints held by Rogers, at least in the sense of explicit acknowledgement of that philosophical tradition. Rogers has, however, also been described as an "idealist pragmatist" driven by a "central contradiction between idealism and pragmatism" (Elliott & Farber, 2010, p. 26). Rogers acknowledged the influence of John Dewey, the classic pragmatist, on his development (Sollod, 1978). That Rogers did not dwell purely in the constructivist world to which Gelso consigns him is evident in the following: "It seems important to distinguish between those awarenesses which, in common-sense terms, are real or accurate and those which are not" (Rogers, 1959, p. 198). Rogers' definition of empathy as the ability "to perceive the internal frame of reference of another with accuracy"(Rogers, 1959) sounds relatively similar to Gelso's "experiencing and perceiving

the other in ways that befit the other" (Gelso, 2011a, p. 13). Gelso does, however, acknowledge that realism depends on empathic attunement, with regards to which he acknowledges Rogers (Gelso, 2011c).

Of particular relevance in the current context is the relationship between the real relationship and outcome. To the extent to which the real relationship involves therapist factors, such as congruence, it may be relevant to the explanation of differential therapist effectiveness. Two studies have explored connections between the real relationship and outcome. While each of these studies shows that some aspect of the real relationship predicts psychotherapy outcome, unfortunately the details vary between the studies.

The first of these studies found that therapist rated real relationship total scores on the Real Relationship Inventory Therapist Form (RRI-T: Gelso, et al., 2005) predicted outcome, as measured by SCL-90-R pre-post-therapy change scores, even when controlling for the working alliance (Marmarosh, et al., 2009). In this study, which involved 31 client-therapist pairs at a university counselling centre, scores on the client rated real relationship inventory (RRI-C:Kelley, Gelso, Fuertes, Marmarosh, & Lanier, 2010) were not significantly predictive of outcome. Nor were client-rated and therapist-rated real relationship scores significantly correlated with each other, although client-rated and therapist-rated genuineness subscale scores were significantly correlated.

The second study involved a total of 50 clients and 4 therapists at a university counselling centre. The clients included18 classified as receiving brief therapy, defined as at least 10 sessions, and 32 classified as very brief therapy, defined as less than 10 sessions. The very brief therapy group consisted of clients who either felt their problems were resolved by 5 sessions or who dropped out (There was a review of progress at 5 sessions at which many concluded their goals were met). The brief therapy group consisted of those for whom both client and therapist felt it was warranted to continue to the full ten sessions. Outcomes were measured using the OQ-45 (Lambert, 2004). Real relationship inventories were completed by

both client and therapist after the third session. For the clients classed as receiving very brief therapy, there were no significant correlations between any of the real relationship scores and outcome. However, for those who completed the full 10 sessions, there were significant correlations between both client-rated and therapist rated real relationship scores and outcome (RRI-C Genuineness: $r=-.61$; $p < .01$; RRI-C Realism: $r=-.39$; $p < .05$; RRI-T Genuineness: $r = -.39$; $p < .05$; RRI-T Realism: $r = -.38$; $p < .05$). Since the study reports that there were no significant differences between the very brief and brief therapy groups in terms of demographics, problem type, severity or outcome, it was concluded that, whereas for the group that continued to the full ten sessions, the relationship was the important factor in determining outcome, for the group who only required five sessions, some other factors such as task or goal related factors may have been more important (Gullo, Lo Coco, & Gelso, 2012).

Taken together, these two studies would seem to indicate that, at least for therapy lasting around ten sessions, aspects of the real relationship are predictive of outcome. Overall, the results tend to suggest that genuineness may be more strongly predictive than realism, particularly where client ratings are involved, and that therapist ratings may be more reliably predictive than client ratings. It is quite clear, however, that further research is needed to clarify that picture.

If the real relationship is predictive of outcome, the relevant question in terms of therapist effectiveness is "what is the therapist contribution to the real relationship?" The results presented above, in so far as they have any bearing on the question, seem to suggest that therapists who are seen as genuine might be more effective than those who are seen as less genuine. Duquette (2010) has explored in some detail, at the theoretical level, what the therapist contribution to the real relationship might be. She sees maintaining the real relationship as the therapist's responsibility. She also notes that the therapist's ability to mentalize is a key component in maintenance of the real relationship. Therapist ability to

mentalize is the same thing as therapist reflective functioning, which will be discussed in more detail in Chapter 7.

4.5.2.3 Predictors of the Rogerian conditions

The Rogerian facilitative conditions are clearly relevant to therapist effectiveness, as has been demonstrated throughout this chapter. A deeper examination of therapist effectiveness therefore requires us to examine the factors which facilitate the facilitative conditions. In other words, a fuller explanation of factors affecting therapist effectiveness requires an exploration of the factors which predict the existence of the Rogerian facilitative conditions.

4.5.2.3.1 Predictors of empathy

Empathy is arguably the most clearly understood and most empirically validated of the Rogerian facilitative conditions. It therefore makes sense to begin our exploration of predictors of the Rogerian conditions with an examination of the factors known to predict empathy.

4.5.2.3.1.1 Gender

Considerable research has gone into investigating personality correlates of empathy (Duan & Hill, 1996). Despite conflicting results, there is a reasonable body of evidence suggestive of a gender bias favouring females in terms of empathy. However, that finding seems mainly to apply to self-report measures of empathy. Empathic accuracy studies largely indicate that men and women are equally empathic (Ickes, 2009) and observer ratings of empathy have been found not to correlate with gender (Strachan & Shiffman, 1980). It is quite likely, therefore, that the greater scores for empathy by females on self-report measures have to do with sex-role stereotypes influencing subjects' self-images, rather than differences in empathic ability.

4.5.2.3.1.2 Cognitive Complexity

Higher cognitive complexity and related variables have also been found to correlate positively with some measures of empathy, although some conflicting results have been reported. In an analogue study, counsellor trainees of higher cognitive complexity, based on division by median split, have been shown to score higher on Carkhuff's accurate empathy scale as rated on interactions in a mock counselling session (Heck & Davis, 1973). Cognitive complexity of self-reported emotional experience has also been found to be significantly positively correlated with accurate empathic understanding (Alcorn & Torney, 1982). On the other hand, in another study, cognitive complexity was found not to be predictive of empathy in a simulated counselling situation with counselling trainees (Blaas & Heck, 1978). However, a study involving 9 therapists and 27 clients found that, in real rather than simulated sessions, therapist cognitive complexity was highly correlated with client's perceptions of therapist empathy, as well as with the ratings of trained judges (Maniei, 1984). Interestingly, in a study of attachment and parenting, cognitive complexity has been found to correlate significantly (r=.72, p<.01) with reflective functioning (Watson, 2009).

A related concept, attributional complexity, has also been found to be predictive of empathy. Attributional complexity is a concept which attempts to capture the complexity of the information gathering phase that people engage in prior to making an attribution about something (Fletcher, Danilovics, Fernandez, Peterson, & Reeder, 1986). Several studies have explored links between attributional complexity and empathy. One study, involving 178 undergraduate students, found that those higher in attributional complexity were rated as more empathic by their peers (Fast, Reimer, & Funder, 2008). In another study involving 186 undergraduate students as subjects, attributional complexity correlated strongly with self-reported empathic concern and perspective taking, as measured by the Interpersonal Reactivity Index (IRI: Davis, 1980). The researchers concluded that the effect on empathic concern was mediated by the effect on perspective taking (Joireman, 2004). However, in an

earlier study of social acuity, involving 64 undergraduates, which included the empathy scale and the Attributional complexity scale amongst the measures completed by the subjects, attributional complexity was found to correlated negatively with self-reported empathy (Funder & Harris, 1986).

4.5.2.3.1.3 Attachment

A number of studies have found links of different types between attachment and empathy. As will be discussed in greater depth in Chapter 5, attachment, like empathy, can be measured in more than one way, and the two main ways in use, interview and self-report, have only very modest correlations with each other. Thus, in examining studies of attachment and empathy, distinctions need to be made regarding the measurement method used. Some of the relationships that have been found are discussed below.

A study using one of the self-report methods of assessing attachment, the Adult Attachment Scale (AAS: Collins & Read, 1990), found that high self-reported attachment security correlates with high self-reported emotional empathy (Kulley, 1994). The study involved 168 college students, who were assessed for as empathy on the emotional empathy scale of the Interpersonal Reactivity Index (IRI: Davis, 1980), a self-report measure of empathy. Another study examining the relationship between self-reported attachment style and empathy, however, found no significant difference in empathic concern between different attachment styles (Erlanger, 1996). This study, which used the Adult Attachment Questionnaire (AAQ: Hazan & Shaver, 1987) to measure attachment, did find that students classified as having a preoccupied attachment style scored significantly higher on the emotional distress scale of the IRI than did secure or dismissing individuals. Nevertheless, another study that used the AAS to measure attachment found that the AAS underlying scales, which are labelled “Close”, “Depend” and “Anxiety”, correlated significantly with the ECR subscales. Specifically, “Close” was significantly correlated with the ECR perspective

taking subscale, “Depend” was significantly correlated with the ECR empathic concern subscale, and “Anxiety” was significantly correlated with two of the ECR subscales: personal distress and fantasy, the greater correlation being with personal distress (Bekendam, 1997). It is of note that the two studies which found significant correlations between attachment style and empathy both used the AAS to measure attachment, whereas the one that did not used the AAQ to measure attachment. This suggests that the difference in results may be due to differences between those scales. The AAS was derived from the AAQ, but whereas the AAQ yields categorical results, the AAS yields continuous scales. This may produce differences in sensitivity to finding a relationship.

Other studies have also examined the relationship between self-reported attachment style and empathy, using instruments other than the AAS and the AAQ. The most commonly used self-report measure of adult attachment in recent studies is the Experiences in Close Relationships questionnaire, in either its’ original (ECR: Brennan & Shaver, 1995) or revised form (Fraley, Waller, & Brennan, 2000). One such study, which explored the relationship between ECR attachment style and IRI empathy in 118 introductory psychology students, found the following: secure attachment was significantly correlated with IRI perspective taking; secure attachment had significantly lower scores on the IRI personal distress scale than did less secure attachment; and there was no significant correlation between attachment and empathic concern (Weinstock, 2002).

One study that related ECR attachment style to Barrett-Lennard Relationship Inventory (BLRI: Barrett-Lennard, 1962) empathy found significant relationships between self-reported attachment security and empathy. The study explored the relationship between the self-reported attachment style and self-reported empathy of 217 mental health clinicians (psychologists, social workers and psychiatric nurses). This study reported a significant effect for attachment security (Dattilo, 2005).

A number of studies have also explored the relationship between attachment state of mind, as measured by the adult attachment interview (AAI: George, Kaplan, & Main, 1996) and empathy. One study that examined the IRI scores of 52 female undergraduates in terms of their attachment classifications on the AAI found that: subjects classed as dismissing had significantly higher IRI personal distress scores than subjects classed as secure or preoccupied; and subjects classed as secure had significantly higher total IRI scores than subjects classed as dismissing. No significant associations were found between the perspective taking, empathic concern or fantasy and any AAI classification (Blumberg, 1998). Another study used a variant of the empathic accuracy paradigm (Ickes, 1993), involving the video recording of a discussion between husbands and wives of a point of conflict between them. Husbands immediately reviewed the video recording and indicated what they were thinking and feeling during it. Wives then viewed the recording and were asked what they thought their husbands were thinking and feeling at the points where the husbands had indicated having specific thoughts and feelings. The similarity or difference between the wives' idea of what their husbands thought or felt and the husbands' reports of what they thought or felt was used to compute indices of the wives' empathic accuracy, which was then related to their attachment classification on the AAI. Empathic accuracy was divided into several categories: accuracy for inferring positive emotions; accuracy for inferring negative emotions; and accuracy for inferring thoughts. Wives who were classified as secure were significantly better than both insecure categories at inferring both positive and negative emotions. Wives classified as secure were also significantly better than wives classified as preoccupied at inferring their husbands' thoughts, but not significantly better than dismissing wives at inferring thoughts (Sabbagh, 2005).

The evidence discussed in the preceding paragraphs suggests that attachment security is predictive of empathy. It seems that the aspects of attachment security that are tapped by self-report measures are predictive of empathy and that the aspects of attachment security tapped

by the adult attachment interview are also predictive of empathy. This makes sense, given the relationship between attachment security and reflective functioning (Fonagy, 2003). This evidence also adds another building block in the case for the relevance of therapist attachment to therapist effectiveness.

4.5.2.3.1.4 Narrative Ability

Narrative ability was found to be highly correlated with measures of empathy in a study that presented participants with several muddled stories and asked them to retell them in their own words. When the retold stories were analysed for narrative cohesiveness, the narrative scores were found to be highly significantly correlated with measures of empathy (Wong, 1995). This is of particular interest in terms of the preceding discussion of attachment and empathy, in as much as it is known that the element in the scoring of the adult attachment interview that is most highly predictive of attachment security is coherence of transcript, which is about how well the narrative hangs together (Crowell, et al., 1996; Waters, et al., 1998; Waters & Waters, 2006).

4.5.2.3.2 Predictors of congruence, genuineness or authenticity

A recent set of studies has provided support for a connection between attachment security and congruence (Gillath, Sesko, Shaver, & Chun, 2010). These studies explored the relationship between authenticity and self-reported attachment security. All of the studies used the Experiences in Close Relationships scale (ECR: Brennan, Clark, & Shaver, 1998) as the measure of attachment security. The concept of authenticity was approached in several ways. The first study used two self-report measures of authenticity: the Authenticity Inventory (Goldman & Kernis, 2002) and the Five-Item Measure of Authenticity in Various Social Roles (Sheldon, Ryan, Rawsthorne, & Ilardi, 1997).

The Authenticity Inventory is a 44-item measure with four subscales: accurate awareness, unbiased processing, authentic behaviour and relational orientation. The

investigators considered the Authenticity Inventory to be a measure of trait authenticity. The originators of the scale relate the concept they are measuring to Rogers (1961) concept of congruence as self-concept/experience similarity (Goldman & Kernis, 2002). In particular, they relate this concept to the accurate awareness subscale of their measure.

The Five-Item Measure of Authenticity, as the name suggests, consists of five items, which respondents are asked to rate in relation to how they would be with different people, the ones used in this study being: members of an ethnic group, a romantic partner, someone at a party, and a sibling. The investigators in the studies reported here described this as a measure of "role authenticity" (Goldman & Kernis, 2002).

In the first study, the questionnaires were completed by 235 undergraduates. The general authenticity score from the Authenticity Inventory was entered as the dependent variable in a regression analysis with attachment anxiety and attachment avoidance as the independent variables. The significant result ($F(7, 227) = 18.73$, $p < .001$, multiple $R = .37$) involved a coefficient of -.23 for anxiety and -.42 for avoidance. Both anxiety and avoidance were significant at the ($p < .001$) level, indicating that attachment insecurity of both forms is negatively related to authenticity, and therefore that attachment security predicts authenticity. Looking at the subscales of the Authenticity Inventory, attachment avoidance was significantly negatively correlated with each of the subscales. Attachment anxiety was significantly correlated with all the subscales except relational orientation. For all the subscales except unbiased processing, avoidance had a higher correlation than anxiety. However, for unbiased processing, attachment anxiety had the greater correlation. A second regression analysis with role authenticity as the dependent variable found a similarly significant association ($F(7, 227) = 23.96$, $p < .00$, multiple $R = .65$). The regression coefficient for anxiety was -.16 ($p<.01$) and for avoidance, -.26 ($p<.001$).

After obtaining the significant results reported above in their first study, the investigators conducted seven additional studies, many of which involved priming subjects

for attachment security, by for example, subliminal presentation of the word "love", or by being asked to recall a situation when someone close to them was available and loving. All of these studies found significant associations between attachment and authenticity, and that priming for attachment security increased state authenticity (Gillath, et al., 2010).

As was discussed earlier in this chapter, congruence is also represented by the genuineness element of what has been called the "real relationship" in psychotherapy (Gelso, 2011b). One study that explored the relationship between attachment security and the real relationship involved 59 client-therapist pairs who were asked to complete a number of questionnaires at some time after the 5th therapy session (Fuertes, et al., 2007). Among the questionnaires were the client version of the Real Relationship Inventory(RRI-C:Kelley, et al., 2010), the therapist version of the Real Relationship Inventory (RRI-T: Gelso, et al., 2005), the Experiences in Close Relationships Scale (ECR: Brennan, et al., 1998) and the Client Attachment to Therapist Scale (CATS; Mallinckrodt, Gantt, & Coble, 1995). The study found that therapist attachment avoidance was significantly correlated with RTT-T scores (r =-.35, p <.001) as well as with client-rated therapy progress (r = -.45, p<.001). Therapist attachment avoidance was also negatively correlated with RTT-C scores (r = -.44, p<.001) and with CATS security (r = -.27, p<.05). Therapist attachment anxiety was not significantly related to any of the real relationship scores, but was significantly negatively related to client ratings of progress (r = -.52, p<.001).

In view of the correlation between attachment security and congruence, predictors of attachment security might also be expected to be predictors of congruence. Such predictors are discussed in detail in the next chapter.

4.5.2.3.3 Predictors of positive regard or warmth

One study which examined sibling relationships in terms of predictors of warmth found that a dismissing attachment state of mind as classified on the Adult Attachment Interview

was significantly negatively correlated with both the dismissing person's perceptions of their warmth in the relationship and the dismissing person's sibling's perception of their warmth in the relationship (Fortuna, Holland, Roisman, Haydon, & Groh, 2011). Warmth was assessed using the Adult Sibling Relationship Questionnaire (ASRQ: Stocker, Lanthier, & Furman, 1997), which yields three subscales: warmth, conflict and rivalry.

Another study also using the ASRQ as the indicator of warmth, found both self-reported attachment avoidance and self-reported attachment anxiety to be significantly negatively correlated with warmth (Matos, 1999). That study used the Adult Attachment Scale (Brennan, et al., 1998) as the self-report measure of attachment style.

A study examining parent-child relationships, which used ratings of the mother's behaviour in a videotaped play session with her child as a measure of warmth, found that the mother's attachment security was significantly positively correlated with the ratings of the mother's warmth (Crandell, Fitzgerald, & Whipple, 1997). That study assessed attachment using the Adult Attachment Interview as a Questionnaire (AAIQ: Crandell, 1994), which involved having subjects answer the AAI questions in written form, rather than in an interview. It is not clear how the AAIQ relates to the AAI or to self-report measures of attachment security, as data for drawing those conclusions is not available.

The findings of the study above are supported by the findings of another study which used the Adult Attachment Interview (AAI: George, et al., 1996) as the measure of parental attachment (Cohn, Cowan, Cowan, & Pearson, 1992). Videotapes of the parents interacting with children around a number of tasks were coded for several variables from which warmth and structure scales were derived. Amongst other results, maternal warmth was found to be significantly related to maternal attachment security ($p < .001$).

The studies discussed above strongly suggest that attachment status is a factor in people's ability to relate with warmth, or positive regard. Taken together with the preceding sections on empathy and congruence, which also suggested a role for attachment, these

studies indicate that, to the extent that the Rogerian facilitative conditions are relevant to therapist effectiveness, attachment security may also be relevant. Attachment will be discussed in more detail in Chapter 5.

4.5.2.4 The theoretical and philosophical basis of Rogers' work on therapist effectiveness

Rogers' work has generally been categorised as humanist, and incorporates elements that have been described as phenomenological or existential. Despite the indirect relationship between Rogers' work on empathy and the overlap of empathy with reflective functioning, which is to be considered in depth later in this paper, it would not seem, at first glance, that Rogers' theoretical foundation has much in common with either attachment theory or reflective functioning. However, as will be shown as this section progresses, there are more links than might be apparent at first glance.

Human agency and individual freedom are strongly emphasised in Rogers' work. His work also incorporates a tension between the phenomenological viewpoint and the objectivist/positivist scientific stance, which is never fully resolved (Barrett-Lennard, 1998). Nevertheless, Rogers' primary focus was more pragmatic than philosophical:

> Then much farther down the scale I would put what is often regarded as a major source of learning, the printed page. Reading, I fear, has most of its value for me in buttressing my views. I realize I am not a scholar, gaining my ideas from the writings of others. Occasionally, however, a book not only confirms me in what I am tentatively thinking, but lures me considerably further. Kierkegaard, Buber, and Polanyi, for example, would fall in that category. But I must confess that when I wish to be scholarly, serendipity plays a very important part. Serendipity, in case you have forgotten, is "the faculty of making fortunate and unexpected discoveries by accident." (Rogers, 1974, p. 121)

This practical, pragmatic stance, which is perhaps not surprising in view of Rogers' self-acknowledged debt to Dewey, may be seen to have something attitudinal in common with the approach of John Bowlby, the founder of attachment theory, who was not afraid to

mix elements from very different intellectual traditions, including ethology, evolution, cognitive science and psychoanalysis. Both men can be seen to have come in some way from a psychoanalytic base but taken their ideas in directions vastly different from the vision of Freud.

In his 1942 book, Rogers makes no mention of phenomenology or existentialism. He refers to Otto Rank, Freud, Fenichel, Rosenzweig, Mowrer, Moreno and Horney, but not to Husserl, Heidegger or Merleau-Ponty (Rogers, 1942a). Rogers does, however, reference Abraham Maslow, another psychologist who has been classified as phenomenological, and it is possible that some phenomenological influences found their way into his work via Maslow. It is not until the late 1940s, and more particularly the early 1950s, that Rogers begins to mention phenomenology. It appears that in this he was influenced by his students: firstly Arthur Combs; and later Eugene Gendlin. Thus, phenomenology presumably fitted the category of serendipitously confirming him in what he was already tentatively thinking. Before looking at some of the psychoanalytic roots of Rogers' thinking, and other links to attachment and reflective functioning, it may be useful to explore the part played in his thought by phenomenology.

Phenomenology involves approaching the world from the perspective of the experience of the individual, or consciousness, with a focus on intentionality (Smith, 2011). Phenomenology does not, however, make the naïve assumptions of classical idealism or constructionism and "detach the mind from the world in order to let a pure and worldless subject constitute the richness and concreteness of the world" (Zahavi, 2008, p. 664). Instead, phenomenology seeks to take account of the embodied, embedded nature of subjectivity, the existence of the other and intersubjectivity, and attempts to "think world, subjectivity, and intersubjectivity in their proper connection" (p. 665). As a philosophical school of thought, phenomenology's principal founder was Edmund Husserl, who lived from 1859 until 1938. Originally studying astronomy and mathematics, he became interested in philosophy and

psychology, partly though the influence of Wilhelm Wundt. Having completed a PhD in mathematics, Husserl began to study philosophy under Brentano and Stumpf, publishing a thesis in 1887, "On the concept of Number", some of which he incorporated into his first published work, "Philosophy of Arithmetic" (Husserl, 1891). When that work was heavily criticised for psychologism, Husserl reacted by attacking psychologism and developing the method of phenomenology (Beyer, 2011). Husserl's work was built on by others, such as Martin Heidegger and Maurice Merleau-Ponty. Phenomenology influenced Rogers indirectly, perhaps via Maslow, but certainly via the phenomenal field theory of Arthur Combs and Donald Snygg (1949). Phenomenal field theory specified that behaviour can only be made sense of by understanding how the individual is perceiving the situation at the time (Stroud, 1950).

As mentioned earlier, Rogers did not make mention of phenomenology in his writings until close to 1950. In addition to the influence of Dewey, whose pragmatic approach would have in many ways suited him, it is highly likely that Rogers' would have also been influenced by William James, whose writings about the self undoubtedly form a foundation for the thinking of many modern theories. Rogers also acknowledges a strong practical influence from Otto Rank, whom he invited to visit and present a series of lectures to the group as early as 1935. The influence of Rank will be explored in more detail below. It is also clear that Rogers' interactions with his clients were, more than anything, his main source of inspiration (Rogers, 1974). However, when he was approached by Sigmund Koch to write a theoretical book chapter, Rogers (1959) drew heavily on phenomenology in formulating his ideas.

Another obvious influence on Rogers' ideas, however indirectly, is the work of Kurt Goldstein. Goldstein formulated the concept of self-actualisation several years before Rogers began using the term (Goldstein, 1939). It would appear that Rogers borrowed the term from Abraham Maslow, who in turn borrowed it from Goldstein. Rogers seems to have begun

using the term in the early 1950s (cf. Rogers, 1954). Maslow began using the term, and crediting it to Goldstein, much earlier (cf. Maslow, 1943). Goldstein, a neurologist and neuropsychiatrist, had been forced to emigrate from Germany with the rise of Nazism, because of his Jewish ancestry. In 1935, he settled in New York, initially working in private practice as a psychiatrist and neurologist. In 1936 he accepted an appointment at Columbia University, involving a professorial position in clinical neurology, in addition to lecturing in psychopathology (Shakow, 1966). Goldstein's book on the organism, which he had written in Amsterdam while on the run from the Nazis, and had published in German in 1934, was translated into English and published in 1939. This work launched the organismic point of view, which very much influenced Maslow and Rogers. Goldstein argues against the idea of explaining human behaviour through ideas like drives and reflexes, or through chemical reactions such as those involving hormones. Instead, he insists that all activity needs to be looked at from the point of view of the whole organism, which seeks to actualise itself, within the constraints provided by the environment, by coming as close as possible to perfection of the capabilities of the organism that it is. "This tendency to actualize its nature, to actualize 'itself,' is the basic drive, the only drive by which the life of the organism is determined" (Goldstein, 1939, p. 196).

The influence of psychoanalysis on Rogers' thought undoubtedly comes from multiple sources. It could be argued that at the time Rogers began working out his ideas, psychoanalysis was the main theory of psychotherapy and therefore the theory from which he needed to differentiate himself in order to establish a new position. Naturally, then, in his training and through his colleagues, Rogers would have been exposed to Freud's ideas, despite never being a psychoanalyst. However, if one considers psychoanalysis more broadly, as a broad tradition of thought that encompasses not only the ideas of Freud, but of those who followed him and almost invariably, whether by choice, or by being frozen out, broke away

from him, then it becomes clear that Rogers was influenced more directly by psychoanalytic thought, through the person of Otto Rank.

Although Rank's later ideas differed dramatically in obvious ways from those of Freud, Rank had a long and close association with Freud, involving strong mutual influence. Born in 1884 into a Jewish Viennese family under the name of Rosenfeld, which he later changed to Rank, Otto Rank had been brought to Freud's attention as a young man by means of a manuscript he wrote examining the psychological characteristics of artists, by which Freud was impressed. Invited by Freud to join his group, he became the first secretary of the International Psychoanalytical Association (IPA), of which Carl Jung was the first president. From 1905 until 1924, a period of almost 20 years, Rank was closely associated with Freud and the psychoanalytic movement. Although his ideas increasingly diverged from Freud, it seems that it was political intrigue on the part of his rivals, Ernest Jones and Karl Abraham, more than anything, which resulted in his ejection from the Freudian camp. The publication of his book on birth trauma in 1924 provided the excuse for intense lobbying by his rivals to have his ideas declared heretical. Although Freud was initially unconvinced, he was eventually persuaded. Following the split, Rank became increasingly critical of a number of Freudian ideas and eventually moved to the United States, where his career was cut short by his untimely death in 1939, ironically also the year of Freud's death.

Rank's ideas differed from those of Freud in a number of fundamental ways, more subtly during their period of collaboration and with increasing clarity as their ways began to part. The major differences between Rank's ideas and those of Freud were as follows: whereas Freud emphasised thought, Rank emphasised feeling; whereas Freud emphasised passivity on the part of the therapist, Rank emphasised activity; whereas Freud emphasised therapeutic neutrality (indifferenz), Rank emphasised empathy; whereas Freud emphasised biology, Rank emphasised culture; whereas Freud emphasised sexuality, Rank emphasised love; whereas Freud emphasised determinism, Rank emphasised personal agency; whereas

Freud emphasised fixed techniques, Rank emphasised creativity; whereas Freud emphasised the role of the father, Rank emphasised the role of the mother; whereas Freud emphasised a medical stance, Rank emphasised a personal stance; whereas Freud emphasised science, Rank emphasised art; and whereas Freud emphasised the role of the past, Rank emphasised the importance of the present.

Like Sándor Ferenczi, his closest friend and collaborator during the Freudian years, Otto Rank had a much stronger focus on the clinical relationship and on finding the best ways to conduct effective therapy than did Freud, except during Freud's early years. Unlike Freud, who became increasingly preoccupied with theory building and increasingly disillusioned with the process of therapy, Rank and Ferenczi became increasingly involved in experimenting with new approaches to therapy. Initially, this was done with Freud's benevolent encouragement, but increasingly, as Freud's cancer progressed and the efforts of Jones, Abraham and others to unseat them from their position of favour gained ground, against a background of Freudian scepticism.

Of particular interest, in the context of the investigation in this paper, is the resonance between Rank's ideas and attachment theory. Rank saw life as a series of attachments and separations. In his view, the first attachment is to the mother and the final separation is death, but in between there is a continuous dialectic of attachment and separation, where separation is part of the seeking of independence and attachment is part of the seeking of emotional security. This continuing dialectic leads to the emergence of the personality (Karpf, 1953). The similarities of these ideas to those of attachment theory are fairly obvious. Bowlby, like Rogers, did reference Rank, but not extensively.

Given the influence of Rank on Rogers and the place of empathy, which overlaps with the attachment related concept of reflective functioning, in the ideas of both men, it is instructive to explore the extent to which Rogers' theory of personality relates to attachment theory. Rogers' theory of personality is divided into 10 sections (Rogers, 1959). The first of

these deals with hypothesised characteristics of infants. It begins by asserting a phenomenological frame of reference, by emphasising experience as the primary datum. This is immediately followed by an assertion of Goldstein's concept of the primary tendency to self-actualize, complete with the use of the word "organism". Rogers then introduces the idea of an "organismic valuing process" (p. 222) relating it to the actualizing tendency and indicating that experiences perceived as having positive value are sought out while those perceived as having negative value are avoided.

In the second section of his theory of personality, Rogers introduces the concepts of self, self-experience and self-concept. He relates these potentially Jamesian concepts to a phenomenological frame by introducing the concept of "experiential field", which in the definitions given at the beginning of the paper, he states is synonymous with "phenomenal field" as used by Snygg and Combs (Rogers, 1959, p. 197).

The next four sections of the theory introduce and develop the idea that the need for positive regard is universal, and pervasive in human beings. Rogers sidesteps the question of whether this need is innate or developed as being irrelevant to his theory, but uses it to introduce the other into the picture. Thus, he makes the need for positive regard the basis of the individual's subjective perception of the developing intersubjectivity. As a result of receiving conditional, rather than unconditional positive regard, Rogers postulates that "conditions of worth" become a part of the person's self-concept. This leads to the development of incongruence, as the individual attempts to attend only to those experiences which fit the conditions of worth, and selectively excludes from awareness those experiences which do not fit the conditions of worth.

The next three sections of Rogers' presentation of his theory of personality delineate his conception of how incongruence leads to behavioural discrepancies and the development of defensive processes, which bring about rigidities of perception and distortions of the perceptual field, in the interests of preserving the self-concept. He goes on to talk about how,

in the case of failures of defensive processes, the organization of the self can be broken, resulting in a switching between processes of self-regulation alternately based on defence and awareness of formerly denied phenomena.

The final section of Rogers' theory of personality deals with the process of reintegration. This ties his theory of personality to his theory of therapy and personality change, by introducing the growth producing effects of receiving the facilitative conditions of unconditional positive regard and empathy from a person who is in a state of congruence.

Whereas considerable attempts have been made to establish empirical support for Rogers' facilitative conditions, as discussed earlier, it does not seem that much effort has been expended on seeking empirical support for Rogers' theory of personality. Rogers himself lamented that it had not been taken seriously (Rogers, 1974). However, were one to translate Rogers' theory from Rogerian terminology and its phenomenal frame into other language, it would not look dissimilar to John Bowlby's attachment theory (Bowlby, 1980), in relation to which considerable effort has been expended in developing empirical support. In particular, the description of the child's need for unconditional positive regard and the response of the child to receiving only conditional regard seems a close parallel to Bowlby's conception of the child's attachment needs and the response of the child to deprivation in that area.

4.5.2.5 Agency, empathy and reflective functioning: Rogerian thought and research since Rogers

The emphasis on client agency is reflected in multiple ways in psychotherapeutic thought and research since the time of Rogers, as of course is the emphasis on empathy. Agency is central to the concept of reflective functioning. Reflective functioning involves understanding the world as peopled by agents with intentions, beliefs, feelings and desires,

and interpreting experience on that basis. Both agency and empathy were central to Rogers' thought. Both are also central to reflective functioning.

While there is a clear legacy of the work of Rogers in elements incorporated into many modern psychotherapy training programs (Buser, 2008), the complexities of shifting political and academic tides appear to have allowed much of his work to recede into the relative background, in an almost taken-for-granted fashion, over the past three decades. Nevertheless, some recent studies have begun to extend on Rogers' work. For example, a recent study of motivational interviewing, which is based on Rogers' notion of client-centred change, suggests that emphasis on client agency is key to understanding the process of change in therapy (Faris, Cavell, Fishburne, & Britton, 2009). This study's emphasis on putting the client in the driving seat is clearly reminiscent of Rogers' contribution to our understanding of change. In addition to studies of motivational interviewing, other studies with a clearly Rogerian ancestry, such as the many therapy process studies associated with the Emotion Focused/Process-Experiential school of therapy, have demonstrated the significance of process variables which are closely aligned with the person of the therapist (Elliott, Watson, Goldman, & Greenberg, 2004; Ellison, Greenberg, Goldman, & Angus, 2009; Greenberg & Watson, 2006; Pos, Greenberg, Elliott, & Lebow, 2008; Warwar, Links, Greenberg, & Bergmans, 2008).

A study of considerable relevance to the question under investigation here reanalysed data from the Treatment of Depression Collaborative Research Program (TDCRP: Elkin, 1994) in terms of the role of the Rogerian triad. Building on a prior reanalysis of the TDCRP data (Kim, et al., 2006), which had established that the relationship between the therapeutic alliance and outcome was mediated by the average level of alliance for the particular therapist, Zuroff, Kelly, Leybman, Blatt, and Wampold (2010) examined the role of Rogerian factors in the differential effectiveness of therapists in the TDCRP. The reanalysis showed that, firstly, differences between therapists in the average extent to which clients

perceived their therapists to have the Rogerian qualities of positive regard, empathy, and genuineness predicted better outcomes for the clients of those therapists. Secondly, those same differences were also predictive of reduced self-critical perfectionism scores in the clients. Self-critical perfectionism is thought to be indicative of reduced vulnerability to future depression. There was also a smaller, but still significant, association such that clients whose perception of their therapist's level of the Rogerian conditions was higher than the average for their therapist's clients tended to have better outcomes. Thus, the ability of a therapist to be good at creating the perception of positive regard, empathy, and genuineness was a primary factor in explaining outcomes, but clients' readiness to perceive those qualities added an additional, but lesser, factor in explaining outcome. The investigators point out that these results call for further research into "the characteristics that distinguish therapists who, in general, tend to be experienced as providing low or high levels of the Rogerian conditions" (Zuroff, et al., 2010, p. 693). This paper represents an effort in that direction.

4.5.3 The Rogerian facilitative factors and therapist effectiveness

Overall, the concepts considered in this chapter have remarkable similarity. Measures of the Rogerian conditions have been found to be highly intercorrelated, suggesting that empathy, positive regard and congruence may be aspects of some underlying ability to relate (Elliott, et al., 2011). "Facilitative interpersonal skills" sounds like a variation on the same theme, given that the items scored "included ratings of verbal fluency, emotional expression, persuasiveness, hopefulness, warmth, empathy, alliance-bond capacity, and problem focus"(Anderson, et al., 2009). Goal-corrected empathic attunement is clearly also another version of empathy.

Attempts to teach empathy as a skill, which began during the 1960s and continue into the present have received periodic criticism since the 1980s (Gordon, 1985; Ridley, Kelly, & Mollen, 2011; Robinson & Halliday, 1987), partly because of the danger that they may miss

the point of empathy and trivialise something that we intuitively understand goes deeper than specific behaviours. Indeed, Rogers himself was critical of some of those attempts:

> But this tendency to focus on the therapist's responses had consequences which appalled me. I had met hostility, but these reactions were worse. The whole approach came, in a few years, to be known as a technique. "Nondirective therapy", it was said, "is the technique of reflecting the client's feelings." Or an even worse caricature was simply that, "In nondirective therapy you repeat the last words the client has said." I was so shocked by these complete distortions of our approach that for a number of years I said almost nothing about empathic listening, and when I did it was to stress an empathic attitude, with little comment as to how this might be implemented in the relationship (Rogers, 1975).

Just as most of us have memories of cramming for an exam of some sort and forgetting the information the following week, we may suspect a similar lack of carry-over from skills training to professional practice. This was aptly demonstrated by the group in the 1980s who trained forensic psychiatric patients in empathic skills, only to find that, while they were able to score better on a test of empathy, it made no difference to their day to day behaviour in the ward (Lomis & Baker, 1985). Thus, the question arises: if some therapists are better than others because they possess a trait that might be called by various names, such as empathy, facilitative interpersonal skills or goal-corrected empathic attunement, where does this trait come from? As was suggested by the exploration of predictors of empathy earlier in this chapter, an answer may be provided by attachment theory. Attachment theory will be explored in detail in the next chapter. Its relationship to therapist effectiveness will be further explored in Chapter 6.

4.6 Summary

Much of the previous research investigating differences in therapist effectiveness has found that factors that seemed intuitively obvious did not relate to therapist effectiveness. However, reasonable supporting evidence exists for a group of attributes, which are related to

each other. Most of these stem directly or indirectly from the work of Carl Rogers. Rogers' facilitative factors of empathy, positive regard and congruence have significant overlap with the concept of reflective functioning, which is the major focus of the current study, thus providing indirect evidence in support of the idea that reflective functioning is relevant to therapist effectiveness. The concepts explored in tracing the history and philosophical base of Rogers' work converge surprisingly on attachment theory. Thus, attachment theory, which is treated in depth in the Chapter 5, may be a suitable theoretical base for explaining therapeutic effectiveness.

CHAPTER 5

ATTACHMENT THEORY

5.1 Overview and purpose of the chapter

The attachment organisation of clients has been investigated extensively. However, there has been considerably less investigation of the attachment status of therapists. Several arguments for the relevance of attachment to therapist effectiveness have been discussed in the preceding chapter. Further evidence of that relevance comes from a study investigating the relationship between therapist attachment and patients' experience of psychotherapy sessions and evaluation of the working alliance (Romano, 2008). That study found significant negative effects for therapist avoidant attachment in terms of the alliance. These findings are supportive of the relevance of attachment to the issue of therapist effectiveness, because the working alliance is known to be correlated with outcome, and it is also known that it is therapist variability in the alliance, as rated by patients that is the major contributor to this correlation (Baldwin, et al., 2007). Therefore, the results of this study suggest that attachment security is likely to be positively related to the effectiveness of psychotherapists.

This chapter examines the conceptualisation and history of attachment theory in detail, as a background to the following chapter, which will examine the role of attachment in the therapeutic relationship. This chapter gives an overview of what attachment theory is, how it developed, how it is measured, and how it relates to the factors examined in earlier chapters.

5.2 Attachment theory: concepts and history

Ideas about the psychological importance of the attachment between children and their parents have been around since 1923, when Otto Rank first drew attention to the trauma children experienced as a result of separation from their mothers (Makari, 2008). The importance of attachment in human development, however, was not accepted widely until

much later. Developed over a number of years by John Bowlby, James Robertson and Mary Ainsworth, attachment theory combines ideas from cybernetics, ethology and evolutionary theory. This combination enables attachment theory to provide a basis for understanding connections between occurrences during close relationships in infancy and behavioural patterns during later life. Conceived at its inception very much as a more empirically based alternative to the theories developed by Freud, attachment theory views human attachment as not essentially different in kind, but only in complexity, from the imprinting process described in relation to birds by Lorenz (1935). Humans are seen as having an adaptive biological imperative to form an attachment bond with at least one adult human during the early months of life. They are also seen as having particular periods of sensitivity with regard to the development of attachment bonds. The early attachment bond is seen as a basis for the later development of other affective bonds, and disruptions in this bond are seen as the basis for later defensive personality organizations. The attachment bond is seen as being forged as a result of an attachment behavioural system, developed by evolution for the purpose of ensuring survival of infants.

5.2.1 The Development of Attachment Theory

John Bowlby was a psychoanalyst who trained under Joan Riviere and Melanie Klein. In treating children under Melanie Klein's tutelage, he was horrified by Klein's almost exclusive focus on phantasy and her dismissal of the relevance of events in the child's environment. Reportedly, Melanie Klein went to the extreme of denying Bowlby permission to even talk to the parents of the child. When events resulting from World War II removed him from Klein's sphere, he was determined to go about redressing the imbalance he perceived in her approach (Karen, 1994). As a result of a contact he made during the war, Bowlby was asked shortly after the war to conduct a psychiatric investigation into homeless children, on behalf of the World Health Organisation. As a part of his preparation for this

investigation, he explored the ideas drawn from such investigators as Spitz, Bender, Levy, Goldfarb, Bakwin, Baldwin, and Ribble. Discovering great similarity in the findings of each of these disconnected researchers, Bowlby combined and summarized their work under the theme of the negative effects of maternal deprivation on children (Bowlby, 1951). A close relationship with a mother or substitute mother that was warm, intimate and fairly continuous, was a prerequisite for mental health, Bowlby stated. He coined the term "maternal deprivation" to refer to the lack of such a relationship, whether because of the absence of a mother figure, or because such a figure was present but unable to provide the required loving relationship. He examined three classes of evidence in support of the contention that maternal deprivation has negative effects on personality development and mental health. Firstly, he examined studies based on direct observation of the development of institutionalised children. Secondly, he examined retrospective studies of disturbed adolescents, and thirdly he examined follow-up studies of children known to have experienced deprivation during infancy. Each of these areas of research led him to believe in the significance of early attachment as a predictor of later mental stability.

Bowlby collaborated over a period of years with James Robertson. Robertson produced several important films: *A Two-Year-Old Goes to Hospital*, *Going to Hospital with Mother*, *Young Children in Hospital*, *Young Children in Brief Separation* and *John*. These films, together with Robertson's publications, had a strong impact on the practice of children's hospitals, and an equally strong influence on the development of Bowlby's ideas. He adopted Robertson's stages of protest, despair and detachment as building blocks for his theory (Karen, 1994).

While Bowlby was clear from quite early on that the attachment of the child to the mother was of extreme importance, he initially lacked a coherent theory to explain it. The field of ethology provided him with the missing links. In the work of Lorenz, Hinde and other ethologists he found a replacement for the Freudian concept of drives that had hitherto

formed the basis of psychoanalytic theory, in a modified concept of instinct, which he called instinctive responses, in which the environment was a key factor (Bretherton, 1992). Bowlby (1958) proposed that sucking, clinging, following, crying and smiling were the primary positive instinctive responses, but that their expression was dependent on appropriate environmental conditions. Support for this position was forthcoming from a series of experiments with rhesus monkeys conducted by Harry Harlow (Karen, 1994). In these well-known experiments, the monkeys were separated at birth from their mothers and placed in wire cages in which there were two substitute "mothers", one covered in cloth and the other made of wire mesh. Irrespective of whether the cloth or the wire "mother" dispensed nourishment, the monkeys preferred the cloth covered "mother" and liked to cuddle it.

Collaboration between John Bowlby and Mary Ainsworth was fundamental to the development of attachment theory. Mary Ainsworth (nee Salter) had done her PhD dissertation on the relationship between adjustment and security in infants, under William Blatz at Toronto (Bretherton, 1992). After marrying Leonard Ainsworth in 1950, she moved with him to London, where she obtained employment with Bowlby, analysing Robertson's data. Following that, she accompanied her husband to Uganda, where she studied the development of attachment between mothers and infants (Ainsworth, 1967). Ainsworth classified infants as securely attached, insecurely attached or not yet attached. She also classified mothers as sensitive or insensitive. She found secure attachment to be correlated with maternal sensitivity.

On returning to the United States, Ainsworth conducted a further longitudinal study with infants in Baltimore. In doing this, she found both similarities and differences between American and Ugandan children. She sought to explore these further in terms of their relationship to underlying principles, such as the concept she had developed in Uganda that children use their mothers as a secure base. While this had been very clear in her Ugandan data, it seemed less clear in Baltimore, and she needed a way to test it. Remembering a paper

she had read by Jean Arsenian (1943) in which children were placed in a strange situation, with and without their mothers, as a way of assessing security, she decided it could be adapted as a means of exploring her hypothesis about attachment and the secure base concept (Karen, 1994). As well as confirming her initial hypotheses, the experiment yielded some unexpected findings. Secure babies behaved in the ways that Ainsworth had predicted. However, insecure babies showed two distinct and very different ways of behaving in the situation, particularly when the mother returned. One group of insecure babies ignored the mother. The other group of insecure babies actively rejected the mother. The two groups of insecure infants she named "ambivalent" and "avoidant" (Ainsworth, 1979). Bowlby consulted with Ainsworth during the period of preparation of her reports on the Ugandan and Baltimore studies, and found great support and inspiration from the interaction (Bretherton, 1992). This inspiration was incorporated into his three volume work on attachment (Bowlby, 1980).

Bowlby is also thought by some to have been influenced by another important theorist of the time, Jean Piaget. Piaget had developed a cognitively based theory of child development. When Bowlby incorporated cognitive-developmental explanations into his theory, through the construct of the internal working model, some considered him to be directly influenced by Piaget (Karen, 1994). However, it seems that the main influence on his development of the internal working model concept was in fact a book by Kenneth Craik (1943), in which it was proposed that individuals use internal models of the external world in order to plan their activities (Bretherton, 1985). By introducing the concept of the internal working model (IWM) as part of his explanatory conceptualisation Bowlby (1980, 1988) had begun to span the gap between the area covered by psychoanalytic theory and the area covered by cognitive theory. Internal working models are mental maps of the world, the self, significant others, and the relationships between them. The development of internal working

models is seen as being heavily influenced by the responsiveness of caregivers to the young child.

Attachment theory now bridged multiple areas of study: psychoanalysis, developmental psychology, ethology and cognitive science. It postulated an attachment system which organised behaviour, on the basis of motivations separate from other previously proposed motivations, such as sex or hunger. It proposed that differences in the behaviour and functioning of individuals were moderated by a cognitive representational system: the internal working model. It also proposed that personality development was in large part governed by these differences (Bretherton, 1985). Attachment theory had become an important integrative theory of human functioning.

5.3 Assessment of attachment

Multiple methods for assessing attachment have been developed. The earliest was the Strange Situation (Ainsworth & Bell, 1970; Ainsworth, Blehar, Waters, & Wall, 1978) which assesses the attachment of children to their parents. Adult attachment has been most commonly assessed by either the Adult Attachment Interview (AAI: George, et al., 1996), or any of the multiple self-report measures of adult attachment developed by social psychologists. Other methods of assessing adult attachment include the Adult Attachment Projective (AAP: George & West, 2001) and the Adult Attachment Prototype Rating (AAPR: Pilkonis, 1988; Strauss, Lobo-Drost, & Pilkonis, 1999).

5.3.1 The strange situation

Ainsworth's Strange Situation involves arranging for the mother, or other primary attachment figure, to leave the room after a stranger has entered it. The mother returns a while later, then leaves the child alone, after which the stranger returns, followed a little later by the mother. Observation and classification of the child's responses in this situation have been used as a test of infant attachment security, wherein the child is classified as either

secure, anxious-ambivalent (also sometimes called resistant-ambivalent), or avoidant, on the basis of their behaviour towards the mother on her return (Ainsworth & Bell, 1970; Ainsworth, et al., 1978). A further classification, called disorganised-disoriented, was later added (Main & Weston, 1981).

5.3.2 The adult attachment interview (AAI)

More recently, attachment "states of mind" in adults, roughly equivalent to the childhood responses to the strange situation, have been classified by using a procedure known as the Adult Attachment Interview (AAI: George, et al., 1996), a procedure which involves interviewing the respondent at length about their relationship with their parents. The scoring of this interview leads to classifying the person as having one of several attachment states of mind. Although these states of mind are seen as corresponding to the infant attachment classifications, they have been given different names, which is one of several factors that tends to make the attachment literature somewhat confusing on first perusal. The adult equivalent of secure attachment is labelled secure-autonomous; the adult equivalent of anxious-ambivalent attachment is labelled preoccupied; the adult equivalent of avoidant attachment is labelled dismissing; and the adult equivalent of disorganised-disoriented is labelled unresolved-disorganised.

The AAI has been criticised for its exclusion of non-verbal aspects of communication (Kotov, 2003), for its categorical classification system (Roisman, Fraley, & Belsky, 2007; Waters & Waters, 2006), for openness to coder subjectivity (Carnelley & Brennan, 2002) and for lumping mothers and fathers together in its coding (Carnelley & Brennan, 2002). It has also been suggested that the AAI measures a person's abilities as a caregiver rather than their attachment security (Shaver, Belsky, & Brennan, 2000). A further criticism of the AAI is that "On a practical level, the AAI is difficult and expensive to use. So much so that it is primarily mastered and used by well-funded researchers already committed to Bowlby-Ainsworth

attachment theory. This limits the likelihood that key ideas will be put to strong empirical tests and also limits the impact and range of inputs to attachment theory from other domains of study" (Waters & Waters, 2006).

Nevertheless, the AAI is the most widely used interview-based method of assessing attachment, has strong correlations with the assessment of childhood attachment using the strange situation and has been found to correlate with a wide variety of theoretically predicted behaviours and attributes, including social competence, aggression, hostility, delinquent behaviours, as well as feelings and behaviour of couples and parent-child dyads (Crowell, et al., 1996). Furthermore, the AAI is "the only measure of adult attachment which utilizes access to memory as part of the scoring system" (Crowell & Treboux, 1995, p. 19), thus positioning it squarely at the interface of cognitive, personality, psychoanalytic and social psychology.

5.3.3 Self-report measures

Until 1987, attachment research had been focussed almost exclusively on infants. A separate body of research had examined the phenomenon of romantic love, most commonly conceptualised as a unitary phenomenon, without a conceptual explanatory framework. In 1987, the idea that differences in the expression of romantic love were related to the attachment histories of the individuals was proposed as an hypothesis, and tested by creating a "Love Quiz", with three parts, which was published as a survey in a local newspaper. The quiz included a single item question on attachment, in which respondents were asked to choose one of three descriptions based on Ainsworth et al's (1978) descriptions of infant attachment patterns. The proportion of people self-classifying into each of the different attachment styles from this question was similar to the proportional distribution of infant classifications reported from the Strange Situation. Furthermore, when the respondents were put into groups based on their answers to the attachment question, it was found that there

were significant differences between groups for the answers to the other questions (Hazan & Shaver, 1987).

Interest in romantic love as an attachment phenomenon following the publication of the study described above led to the development of an ever-increasing number of self-report attachment questionnaires, generally based on questions about romantic love. This also led to further confusion of terminology, in that slightly different terms were used to describe the attachment styles yielded by many of these measures.

The first step towards a clarification of the rampant multiplication of measures and terminology occurred when it was proposed that adult attachment could be understood in terms of two underlying dimensions (Bartholomew, 1990). These were described as model of self and model of other. If the person had a positive model of self and a positive model of the other, then they were secure; if the person had a negative model of self and a positive model of the other, they were preoccupied, or anxiously attached; if the person had a positive model of self and a negative model of the other, they were dismissing; and if the person had a negative model of self and a negative model of the other, they were fearful. Although Bartholomew described these underlying dimensions in terms of model of self and model of other, one diagram in the article had the word "avoidance" in brackets adjacent to model of other and the word "dependence" in brackets adjacent to model of self. In later works the word "anxiety" replaced dependence. Later social psychology researchers have preferred the terms avoidance and anxiety as names for the underlying dimensions, perhaps because they sound more social and less cognitive. However, it is worth noting that the word "anxiety" does not convey the same meaning as either the phrase "positive model of self" or the phrase "negative model of self". Similarly, the word "avoidance" does not convey the same meaning as "positive model of other" or "negative model of other". It could therefore be argued that there is a lack of clarity as to what is actually being measured here. Furthermore, the labels

"avoidance" and "anxiety" have connotations that are more pathologising than the labels "model of self" and "model of other".

Initially, the proposal of two underlying dimensions failed to reduce the number of measures and terms used in self-report attachment research, and in fact increased the confusion, as some researchers created measures to tap anxiety and avoidance, while others attempted to tap the four attachment styles, and still others proposed additional styles (Brennan, et al., 1998). Eventually, Brennan, Clark and Shaver (1998) decided to create a pool of items from 14 different scales, resulting in a pool of 323 items, after duplicates were removed. Those items that did not pertain to close relationships were reworded so that they did. Retaining the scales and scoring from the original instruments, they then conducted a principal components factor analysis of the scale scores, using an oblique rotation. This analysis yielded two factors, which they labelled anxiety and avoidance. The investigators then selected, from the 323 items, the 18 that correlated most highly, irrespective of direction of correlation, with their avoidance factor and the 18 that correlated most highly with their anxiety factor. This resulted in a 36-item instrument which they called the Experiences in Close Relationships scale (ECR). Since it was claimed that this scale contained the best items from all previous scales, this scale became the most used self-report measure of attachment, thus reducing some of the confusion.

It is important to note that the ECR was not derived from a factor analysis of the pool of 323 items, but from a factor analysis of 60 scales taken from the 14 instruments from which the items were drawn, even though some of those items had been changed in wording. It is not clear why the investigators chose this somewhat strange procedure for arriving at the underlying factors, given that it must have been more complicated to do than simply factor analysing the 323 items would have been, particularly given that the order of items had been randomised. They did in fact conduct a factor analysis at the item level, which is alluded to towards the end of their paper as having produced 12 factors. These are described as "(1)

Partner is a Good Attachment Figure; (2) Separation Anxiety; (3) Self-Reliance; (4) Discomfort with Closeness; (5) Attachment-Related Anger at Partners; (6) Uncertainty about Feelings for Partners; (7) Discomfort with Dependence; (8) Trust; (9) Lovability /Relational Self-Esteem; (10) Desire to Merge with Partners; (11) Tough-Minded Independence; and (12) Fear of Abandonment" (Brennan, et al., 1998, p. 67). They reported that a factor analysis of the 12 factors yielded a two factor solution.

Later factor analyses of the ECR have been divided, in that confirmatory factor analyses have largely confirmed the underlying two-factor structure of the ECR, but exploratory analyses have generally yielded a larger number of factors, usually somewhere between 4 and 6 (cf. Levy, Meehan, Weber, Reynoso, & Clarkin, 2005; Lo, et al., 2009; Parker, Johnson, & Ketring, 2011; Wei, Russell, Mallinckrodt, & Vogel, 2007). These factors tend to subdivide anxiety and avoidance into more than one component.

For example, a study which used the ECR with a population of people meeting diagnostic criteria for borderline personality disorder, initially found 7 factors, but decided that a 6-factor solution was more interpretable and more internally consistent. Thus, the following 6 factors were reported: "comfort in sharing thoughts and feelings"; "wanting more closeness than others provide"; "anger at others' absence"; "withdrawing in response to feelings of closeness"; "worries about abandonment and being alone"; and "difficulty depending on others" (Levy, et al., 2005, p. 69). These were examined for internal consistency as scales, with the following reported alphas, in order of the scale names given above: 0.90, 0.80, 0.78, 0.81, 0.74 and 0.68.

Similarly, a study which used a version of the ECR in which the phrase "romantic partner" had been replaced by "people I'm close to" to explore attachment in cancer patients conducted an exploratory factor analysis in addition to a confirmatory factor analysis. The confirmatory factor analysis fit poorly. The exploratory factor analysis found the following four factors: "Frustration about Unavailability"; "Discomfort with Closeness"; "Turning

Away from Others"; and "Worrying about Relationships" (Lo, et al., 2009, p. 495). Comparing this study with Levy et al (2005) study, it is interesting to note that there is considerable overlap in the factors derived. For example, all the items in the “anger at others’ absence” factor described by Levy and his co-researchers loaded heavily on the "frustration about unavailability" factor described in the Lo et al (2009) study. It is also noted that the descriptions given to the factors in these studies are generally wording in ways that have negative connotations, perhaps because the intent of the authors is to study pathology. Nevertheless, it would be quite possible to validly rename the factors with more positive labels. For example, the underlying concept implied in “discomfort with closeness” might reasonably be described as “desire for more personal space” and “frustration about unavailability” might be described as “intense desire for closeness”.

5.3.4 Interview and self-report – different domains

A considerable body of research into adult attachment has used the self-report measures of attachment. Quite a number of other studies have used the AAI. It is of some concern that the ways of measuring adult attachment may not be measuring the same thing, which makes it difficult to interpret and compare the results of different studies, which all say they are about attachment. It is clear that, at the theoretical level, they are aimed at different manifestations of attachment, in as much as one is concerned with the activation of attachment in romantic relationships and the other is concerned with the activation of attachment in relation to parents. It is not clear theoretically how much overlap there is between these. Empirically, a number of studies have suggested minimal overlap, but on the other hand, many of these studies have also been criticised on a variety of grounds, including small sample size and other methodological problems. A recent investigation of this area (Roisman, Holland, et al., 2007) concluded that there is very small overlap between the two types of measures, and that each predicts distinct aspects of adult attachment related

functioning, a conclusion that suggests that the area of attachment may be more complex than is yet fully understood.

The AAI involves a 90-minute interview which has to be transcribed, followed by a complex coding process, which requires considerable training to establish rater reliability. Self-report measures are quick and easy to administer, but do not measure the same domain. Given that interview and self-report approaches appear to measure different domains, and that the AAI is complicated and expensive to use, there has been interest in alternative methods for measuring adult attachment which might correspond more closely to the AAI. Some attempts at creating such a measure are discussed below.

5.3.5 The adult attachment projective (AAP)

One promising method is the Adult Attachment Projective (AAP). This projective test, which takes 30 minutes to administer and an hour to score, is reported to have classification convergence with the AAI at the level of .86 (George & West, 2001). While this measure still requires a 2 week seminar for rater training, it nevertheless appears promising as a less time-intensive alternative to the AAI, for applications that require purely categorical classification, and for which scoring for additional factors such as reflective functioning is not required.

5.3.6 The adult attachment prototype rating (AAPR)

Another alternative to the AAI is the Adult Attachment Prototype Rating (AAPR: Pilkonis, 1988; Strauss, et al., 1999). The AAPR involves an intensive clinical interview that includes an interpersonal/developmental history based both on early experience and later attachment patterns, which is then rated by a panel of judges in terms of its closeness of fit to a series of seven different prototype descriptions. A set of rules are then applied to these ratings to produce either categorical ratings or continuous scores. The AAPR has been used in more than 20 studies over the last decade, most of them German, in which its validity and

reliability have been demonstrated (e.g. Albani, et al., 2002; Dick, et al., 2005; Kirchmann, et al., 2009; Martínez Guzmán & Nuñez Medina, 2007; Schmidt, Nachtigall, Wuethrich-Martone, & Strauss, 2002; Strauss, et al., 2006). However, it is not clear how closely its classifications relate to those of the better known adult attachment interview, and the fact that a large proportion of the studies reporting its use are in German makes it somewhat difficult for those who don't speak German to evaluate.

5.4 Attachment status – categories or continua?

A further issue related to the differences between the AAI and self-report measures is the question of whether attachment should be considered in terms of distinct categories or continua. Both the strange situation and the AAI classify attachment into distinct categories. Most self-report measures now classify attachment in terms of two underlying dimensions. Recent investigation of the AAI using taxometric methods to determine whether the underlying variance better fits a categorical or a continuous model, based on the data from 504 Adult Attachment Interviews, found that the data were supportive of a continuum from secure to dismissing, and indeterminate regarding whether preoccupied was better regarded as categorical or continuous (Roisman, Fraley, et al., 2007). This raises some questions as to whether the current scoring strategy for the AAI is the most suitable. Nevertheless, the scoring strategy for the AAI is open to the possibility of calculating continuous scores, as was done in the research reported above. Continuous scores for the AAI have also been calculated on the basis of a discriminant function, yielding one score for attachment security and another for dismissing versus preoccupied (Waters , Treboux , Fyffe, Crowell, & Corcoran, 2005).

5.5 Stability and change in attachment status

There is reasonable evidence for a substantial degree of continuity in attachment status across the lifespan. One study, for example, found 72% correspondence between attachment status in infancy, as measured by the strange situation, and attachment status at 21 years, as

measured by the AAI (Waters & Hamilton, 2000; Waters & Merrick, 2000). Another study explored stability of attachment status from 3 months prior to marriage, as assessed by means of the AAI to 18 months after marriage, as assessed by the Current Relationships Interview (CRI). This study found 78% correspondence between attachment status at the two points in time, with the change that did occur being mainly in the direction of greater security (Crowell, Treboux, & Waters, 2002). This is important, in that attachment is generally conceived of as relatively stable, but amenable to change in the light of new experiences.

5.6 Secure base and haven of safety

In describing her well known study of babies in Uganda, Mary Ainsworth stated that "There was impressive evidence of the use of the mother as a secure base from which to explore the world and as a haven of safety" (Ainsworth & Bowlby, 1991, p. 337). Safe haven and secure base have since been considered to describe two of the main functions of an adequate attachment figure (Marvin, Cooper, Hoffman, & Powell, 2002), and as such, both are likely to be relevant to the role of attachment in psychotherapy.

5.7 Attachment and temperament

Although the majority of research into the genesis of attachment organisation has focussed on environmental issues such as parental behaviour and parental attachment organisation, there is evidence to suggest that temperament and heredity may also play a part. A longitudinal study that investigated the relationships between infant temperament, maternal sensitivity, infant regulatory behaviour and infant attachment organisation in 48 premature infants concluded that both maternal sensitivity and temperament were related to infant attachment organisation (Fuertes, Santos, Beeghly, & Tronick, 2006). In this study, mothers rated the infants' temperament and behaviour at 1 month old and at 3 months old using the Escala de Temperamento de Bebé (Lopes dos Santos, Fuertes, & Sanches-Ferreira, 2005). At 3 months, infants' stress-regulation capacity was assessed by means of the Infant Regulatory

Scoring System (IRSS: Tronick & Weinberg, 1990). The study found that infants classified as avoidant or resistant were significantly more likely to have had their temperament rated as difficult at 1 month of age ($p < 0.001$). They also found that mothers of infants rated as having a difficult temperament at 1 month interacted with them in a less sensitive and more passive manner at 9 months. All of this suggests the possibility of a complex interaction between temperament and maternal behaviour. On the other hand, the study did not exclude the possibility that the mother's own attachment organisation might lead her to rate her infant as difficult at 1 month and behave less sensitively towards the infant at 9 months.

Further support for a possible role for temperament in attachment organisation comes from a study of heritability of self-reported adult attachment (Donnellan, 2008). That study, which used multivariate behaviour genetic analysis, assessed adult attachment using an 18-item modified version of the Adult Attachment Scales (AAS: Collins & Read, 1990). The authors concluded from their analysis that 45% of the variability in attachment anxiety and 39% of the variability in attachment voidance were accounted for by additive genetic effects.

The conclusions of the two studies reported in the preceding paragraphs are strongly challenged, however, by a study involving 110 pairs of twins, 52% of which were monozygotic and the remaining 48% dizygotic. The twins were assessed for attachment using the strange situation. The study found 70% concordance for attachment between monozygotic twins and 64% concordance between dizygotic twins. The results of the analysis in the study indicated that 14% of the variance in attachment was accounted for by genetic influences, 32% by shared environmental influences and 53% by non-shared environmental influences (O'Connor & Croft, 2001). This suggests that the influence of temperament may be fairly modest.

5.8 Attachment and it's relation to other factors thought to affect therapist effectiveness

Almost 20 years before the birth of attachment theory, Karen Horney wrote:

> But through a variety of adverse influences, a child may not be permitted to grow according to his individual needs and possibilities... people in the environment are too wrapped up in their own neuroses to be able to love the child, or even to conceive of him as the particular individual he is... as a result, the child does not develop a feeling of belonging, of "we," but instead a profound insecurity and vague apprehensiveness, for which I use the term *basic anxiety* (Horney, 1950, p. 14).

For Horney, the insecurity encompassed in basic anxiety could be expressed in three ways: the self-effacing solution, based on moving towards others, or the attraction of love; the expansive solution, based on moving against others, or the attraction of mastery; and the resigned solution, based on moving away from others, or the attraction of freedom. It has been pointed out that these map very neatly onto the categories used to describe adult attachment, with secure attachment equating to having minimal basic anxiety, preoccupied attachment equating to the self-effacing solution, dismissing attachment equating to the expansive solution and fearful attachment equating to the resigned solution (Buller-Taylor, 1999).

It has been suggested that the multi-layer system of personality assessment developed by Timothy Leary (1957) is a comprehensive method for measuring Horney's constructs (Roemer, 1986). Although Leary's work was ignored for some time as a result of the publicity surrounding his later experimentation with psychedelic drugs, his work eventually spawned a tradition of interpersonal circumplex instruments, such as the Structural Analysis of Social Behaviour (SASB: Benjamin, 1974), the Interpersonal Adjective Scales (IAS-R: Wiggins, Trapnell, & Phillips, 1988), the Inventory of Interpersonal Problems (IIP-64: Horowitz, Rosenberg, Baer, Ureno, & Villasenor, 1988), and most recently, the Inventory of

Interpersonal Strengths (IIS: Hatcher & Rogers, 2009). As mentioned earlier, circumplex interpersonal measures have been found to indicate that higher levels of affiliation by both patient and therapist are associated with both better outcome and more positive alliance ratings (Coady, 1990; Henry, Schacht, & Strupp, 1986; Muran, 2002; Muran, Samstag, Jilton, Batchelder, & Winston, 1997).

Attachment theory proposes that individuals develop working models based on their early experiences, which form the basis for later interpersonal behaviour. From this perspective, one would expect to find a relationship between attachment and interpersonal behavioural tendencies, as measured by the various interpersonal instruments described above. Although this proposed relationship has been investigated by a number of people (Aaronson, 2009; Cannava, 2000; Chen & Mallinckrodt, 2002; Gallo, Smith, & Ruiz, 2003; Haggerty, Hilsenroth, & Vala-Stewart, 2009; Johnson, 2005), it is noteworthy that all investigations to date have used self-report measures of attachment, which are known to measure distinctly different elements than those measured by the Adult Attachment Interview. Perhaps because of the use of differing self-report measures for assessing both attachment style and interpersonal behaviour, and different methodologies, these studies do not present an entirely consistent picture, although each study has found significant results. Overall, there would appear to be stronger support for a relationship between a secure/insecure self-reported attachment factor and the interpersonal circumplex than for the preoccupied avoidant dimension. Both high self-reported anxiety and high self-reported avoidance appear to be associated with hostile submission

The majority of circumplex measures of interpersonal interaction have been based on interpersonal difficulties of one type or another. The one significant exception is the Inventory of Interpersonal Strengths (IIS: Hatcher & Rogers, 2009). The IIS was designed to assess positive interpersonal attributes representing all octants of the interpersonal circumplex, including those normally considered less than socially desirable. The measure is

reported to have very adequate psychometric properties and a robust circumplex structure. Taking a positive view, and focusing on interpersonal strengths seems more relevant to an examination of therapist effectiveness than does a focus on interpersonal difficulties. Furthermore, the concept of interpersonal strengths might be expected to have some degree of overlap with aspects of the concept of facilitative interpersonal skills, which, as mentioned earlier, have been thought to be associated with therapist effectiveness (Anderson, 2001; Anderson, et al., 2009).

As reported in the previous chapter, attachment is known to be related to each of the three Rogerian facilitative factors: empathy, positive regard and congruence. This is noted again in this section, but it is not necessary to repeat the evidence which has been presented previously.

5.9 Bowlby's conception of therapy

John Bowlby conceptualised psychotherapy in terms of five primary tasks. The first of these was for the therapist to provide a secure base from which the patient could explore; the second was encouraging the patient to explore current relationships particularly in terms of expectations, feelings, motivations and conceptualisations; the third was to explore the therapeutic relationship in a similar fashion; the fourth was to consider the ways in which current relationship behaviours and expectations are patterned on earlier relationship experiences; and the fifth was to encourage the patient to reflect on the adequacy or appropriateness of the identified patterns of expectations and behaviours, and consider potentially more useful alternatives (Bowlby, 1988). Translated into the current language of attachment theory, this is essentially providing a secure base, identifying internal working models and changing them. It could also be argued that an implicit prerequisite for each of the tasks is the involvement of reflective functioning, since each of them involves a different aspect of the therapist mentally entering into, and reflecting on, an aspect of the person's

experience. Reflective functioning is explored in detail in Chapter 7. The section which follows examines a proposed relationship between attachment theory and therapy which, while held explicitly or implicitly by many researchers and therapists, involves to some extent the assumption that good therapy involves experiences in some way similar to good childhood development. This is a relatively unexamined assumption, and caution is advised. The fact that psychotherapy often in some way "corrects" deficits acquired in childhood does not necessarily mean that it does so in a way that is analogous to parenting. Nevertheless, with this caveat in mind, it may well be worth exploring the possible relationships between therapy and infancy. In doing so, it should be born in mind that what is mainly being explored is that element of therapy which is commonly labelled "common factors", rather than the elements involved in specific interventions. This is a reasonable endeavour, in view of the evidence presented in Chapter 3 suggesting that therapist adherence to and competence in applying specific interventions are most likely not involved in differences in therapist effectiveness. The fact that therapists may believe that what they are doing is applying specific interventions to, for example, modify distorted cognitions, need not prevent their clients from perceiving them as attachment figures.

5.10 The concept of the therapist as secure base and haven of safety

Farber, Lippert, and Nevas (1995) have proposed that the therapist constitutes an attachment figure for the patient, and that the therapist is viewed as a "wiser and stronger" figure, who creates a safe environment and provides a secure base from which the patient can explore. They also contend that the therapist provides "relief from severe distress and feelings of deep dependence [that] may be seen as the emotional corollary to the biological survival of an infant" (p. 208), and that the repair of therapeutic ruptures, which is an important part of therapy, helps to engender a strong sense of felt safety in the relationship. Essential to the

provision of a secure base is the "constancy, availability, sensitivity and responsiveness" (Farber, et al., 1995, p. 207) of the therapist.

This concept of the therapist as secure base, if correct, strongly suggests that the therapist's attachment status should be relevant to the therapist's effectiveness. If therapists need to provide a secure base for their clients, then therapists need to be capable of providing a secure base. Evidence from studies of parenting suggests that securely attached parents are best at providing a secure base for their children (Cohn, et al., 1992; Slade, Belsky, Aber, & Phelps, 1999). By analogy, one would expect that securely attached therapists would be best at providing a secure base for their clients. This proposition is explored in more depth in the next chapter.

5.11 Summary

In order to pave the way for a discussion of the relationship between attachment theory and therapist effectiveness in the subsequent chapter, this chapter has traced the history and development of attachment theory, from its various roots in psychoanalysis, cognitive science and ethology, through to discussion of how it is measured and how it relates to factors discussed in earlier chapters. Bowlby, Robinson and Ainsworth have developed a broad theory with a strong empirical base, which explains much human behaviour and ties in with the concept of the therapist as a secure base. This provides a foundation for considering the role of attachment in therapy in Chapter 6.

CHAPTER 6

ATTACHMENT THEORY AND THE THERAPEUTIC RELATIONSHIP

6.1 Attachment theory and therapist effectiveness

As stated at the end of the previous chapter, if a key aspect of therapy involves therapist being required to provide a secure base for the client, then the therapist's attachment classification should be relevant to the therapist's effectiveness, since evidence from parenting suggests that securely attached therapists would be best at providing a secure base for their clients. While few studies have directly assessed the relationship between therapist attachment and therapist effectiveness, a number of studies have investigated the role of therapist attachment in relation to aspects of the therapeutic relationship thought to be connected with outcomes. These cover such areas as the role of therapist attachment in relation to the therapeutic alliance, the relationship between attachment and countertransference, and relationships between therapist attachment and clients' experience of therapy.

6.2 Alliance-outcome research

The therapeutic alliance is a mediating variable in some of the research discussed in the remainder of this section. As discussed in chapter 2, the therapeutic alliance has consistently been found to be predictive of outcome (Baldwin, et al., 2007; Barber, et al., 2000, 2009; Martin, et al., 2000; Marziali & Alexander, 1991; Meyer, et al., 2002). This fact is relevant because it links observed relationships between attachment and the therapeutic alliance to outcome, and therefore to therapist effectiveness.

6.3 The secure base and the therapeutic alliance

Just as attachment to parents has been conceptualised by Bowlby and Ainsworth as providing a secure base from which children are then able to explore, it has also been

considered by some that clients form an attachment bond with their therapist, which provides a similar secure base from which they can explore. Evidence in support of this idea has been provided by several studies. As is common in the attachment literature, at least two separate methods exist for measuring the attachment between client and therapist: self-report and interview.

The Client Attachment to Therapist Scale, (CATS; Mallinckrodt, et al., 1995), a self-report measure of client attachment to therapist, has been used in several studies exploring the potential use of the therapist as a secure base by client. The CATS has three subscales: secure, avoidant-fearful and preoccupied-merger. Two of these, secure and avoidant fearful, have been found to correlate significantly, in opposite directions, with self-report measures of session exploration, session depth and session smoothness, when controlling for the working alliance, a finding which has been interpreted as consistent with the application of Bowlby's (1988) concept of the secure base to the client-counsellor situation (Mallinckrodt, Porter, & Kivlighan, 2005). An earlier study, using the Components of Attachment Questionnaire (CAQ), had similarly found that patient attachment to the therapist was correlated with stronger alliance and greater reported feelings of security, and that the component of attachment most significantly correlated with the alliance was the secure base (Parish & Eagle, 2003).

As already mentioned, the alternative to self-report for measuring attachment between client and therapist is interview. A modified version of the Adult Attachment Interview, named the Patient-Therapist Adult Attachment Interview (PT-AAI) has been used in the investigation of the therapeutic relationship (Diamond, Stovall-McClough, Clarkin, & Levy, 2003). Although it would be very interesting, from the perspective under examination here, to know whether interview-based assessments of the attachment between therapist and patient also support the secure base hypothesis, such evidence is currently lacking. The only study to date which uses the PT-AAI used a sample of 10 patients and 5 therapists, to examine both

patient and therapist attachment, and also looked at both patient and therapist reflective functioning (Diamond, et al., 2003). In this study, patients in treatment for Borderline Personality Disorder, using Transference-Focused Psychotherapy, were assessed at 4 months and 1 year into therapy with the AAI, and both patient and therapist were assessed with the PT-AAI at 1 year only. The interviews were scored for both attachment state of mind and reflective functioning. Since the sample size was too small to permit statistical analysis, a case-study approach was taken. The researchers were particularly interested in the similarities and differences between the reflective functioning of the patient and therapist, so their conclusions will be revisited in a later chapter. With regard to patient-therapist attachment, the only conclusion drawn was that patient-therapist attachment seemed to largely mirror the attachment of the patient to parents, as assessed by the AAI, which the authors interpreted as evidence that transference plays a large part in therapy. Whereas it is clear from the Mallinckrodt, et al. (1995) study that there is a relationship between self-reported attachment within the therapy dyad and depth of exploration in therapy, the relationship between depth of exploration and interview based classifications of attachment within the therapy dyad is yet to be established.

6.4 Therapist attachment and the therapeutic alliance

A small number of studies have explored the relationship between therapist attachment style and the therapeutic alliance. Using a mail-out to 491 psychotherapists from various therapeutic orientations, one study explored the alliance, quality, attachment, problems in therapy, and personality, using self-report measures (Black, Hardy, Turpin, & Parry, 2005). The alliance was measured using therapist ratings only. Therapist attachment styles were found to explain significant additional variance in alliance and in therapy problems after controlling for personality, with significant positive correlation between secure attachment style and the alliance. Anxious attachment style was found to have a significant negative

correlation with alliance, and a significant positive correlation with the number of reported therapy problems. A significant correlation with the alliance suggests a likely correlation with outcome, although this was not measured. Nevertheless, it is also possible that these results represent a mixture of common method variance and socially desirable responding. Therapists would know that it is more desirable to be securely attached and that it is more desirable to have good alliances with clients, so that those reporting correlated secure attachment and good alliances might be those with a need to present themselves in a positive light, whereas those reporting insecure attachment and poorer alliances could be those who were more scrupulously honest.

Other studies have reported a more confusing pattern of results. A survey of 464 therapists which found no support for any of its hypotheses found fearful attachment correlated most highly with the alliance (Coon, 2007). A psychotherapy process study using self-report measures of alliance and attachment (Sauer, Lopez, & Gormley, 2003) found that therapists with an anxious attachment style had significantly better alliance scores at the beginning of therapy, but that these deteriorated as therapy progressed, relative to other therapists, so that in the longer term, therapist attachment anxiety was associated with poorer alliance ratings.

6.5 Attachment and countertransference

Another intermediate variable that has been investigated as part of the psychotherapy process is countertransference. One study investigated the attachment style of both clients and trainee counsellors in terms of their effect on supervisor rated countertransference and session evaluations (Mohr, Gelso, & Hill, 2005). Attachment style was measured using the Experiences in Close Relationships Scale (ECR, Brennan et al, 1998). While client fearful attachment style was negatively associated with client ratings of session smoothness and depth, trainee counsellor dismissive attachment style was associated with supervisor ratings

of countertransference behaviour as hostile. Hostile and distancing ratings of countertransference were highest with the preoccupied clients and trainee counsellors who reported dismissing or fearful attachment styles.

6.6 Therapist attachment and depth of intervention

An interesting study examined the relationship between both clinician and client attachment organization related attachment and third party coder ratings of interviews with the clinician about their interaction with the client. From the ratings, a "depth of intervention" score was derived, which served as the dependent variable. Although the study found no significant main effects, a significant interaction was found between therapist attachment security and client preoccupation. The interaction meant that insecure therapists had significantly greater depth of intervention with more preoccupied clients and that secure therapists had greater depth of intervention with clients who were less preoccupied (Dozier, Cue, & Barnett, 1994). The clinicians were case managers of clients with long term mental health problems. It should be noted that the depth of intervention score did not entail any examination of the actual interaction between client and therapist, but only an assessment of the therapist's report of what occurred, which does not necessarily correlate with the client's perception of what occurred (Bachelor & Salame, 2000; Singer, 2005; Thompson & Hill, 1991).

6.7 Other observed effects of therapist attachment style

A previously mentioned study into the relationship between therapist attachment and clients' experience of psychotherapy sessions found significant negative effects for therapist avoidant attachment (Romano, 2008). Even when controlling for the effect of the therapeutic alliance, therapist avoidant attachment style, as measured by the Experiences in Close Relationships Scale (ECRS: Brennan et al., 1998) was significantly negatively related to

client attachment to the therapist, as measured by the Client Attachment to Therapist Scale (CATS; Mallinckrodt, et al., 1995).

The relationship between therapist attachment security and alliance ruptures has been another area of study regarding therapist attachment. One analogue study investigated alliance ruptures by means of having postgraduate psychotherapy students respond to video segments (Rubino, Barker, Roth, & Fearon, 2000). The video segments presented situations considered by the investigators to involve alliance ruptures. Student therapist's responses to the video segments were analysed and reported as indicating that secure therapists' responses to alliance ruptures were more empathic than those of less secure therapists.

6.8 Attachment and therapist effectiveness

The one study to date which has directly assessed the effect of therapist attachment as measured by the AAI and therapist effectiveness was conducted in an inpatient setting, and may therefore not be representative of the majority of psychotherapy which happens in a community setting. That study, which involved 31 therapists and 1,381 patients, used hierarchical linear modelling (HLM) in an attempt to predict alliance and outcome from AAI dimensional ratings of security versus insecurity and dismissiveness versus preoccupation. The study found no significant main effects. However, for the more severely impaired patients only, attachment security was predictive of better alliance and better outcome (Schauenburg, et al., 2009).

6.9 Summary

Juxtaposing the statements that an essential aspect of therapy is the provision of a secure base for the client and that securely attached parents are best at providing a secure base for their children leads to the suggestion that securely attached therapists will be most effective in helping their clients. While this is open to empirical verification, investigations to date have generally only assessed this question indirectly. Specifically, explorations of

attachment and the therapeutic alliance, which is known to be predictive of outcome, combined with explorations of attachment and countertransference, provide preliminary support for a relationship between therapist attachment and therapist effectiveness. However, this relationship is yet to be directly established, since the only study which has made that attempt thus far gave equivocal results and was set in an inpatient facility.

CHAPTER 7

REFLECTIVE FUNCTIONING

7.1 Definition

Reflective functioning, or mentalization, describes the ability to reflect on, conceptualise and achieve felt comprehension of the existence of complex states of mind in ourselves and in others. It involves cognitive and affective aspects, together with an understanding of the ambivalent interplay of conflicting desires and goals that constitute motivation. It involves a focus on agency in ourselves and others. It involves the ability to hold in mind multiple points of view concurrently. Reflective functioning involves concepts which are known by many other names, including theory of mind, mind-mindedness, metacognition, psychological mindedness, mind perception, mind reading, perspective taking and reflective functioning. As discussed in Chapter 3, reflective functioning also has considerable overlap with other concepts such as empathy and goal-corrected empathic attunement.

7.2 History of the concept of reflective functioning

Developmental aspects of the concept of reflective functioning were explored under the name of "ejective" or "social self" by James Baldwin during the late 19th century (Obiols, 2009). Jean Piaget developed Baldwin's ideas further, and made them more influential. His description of the very young child as "egocentric" was his way of indicating that the child was yet to develop an adequate mentalizing capacity (Flavell, 2004). Baldwin's influence was also instrumental in Vygotsky's development of ideas that have only become widely influential more recently (Obiols, 2009). In discussing "theories of our knowledge of another's mind", Vygotsky states, "Here, too, is the root of the question of another person's

'I', i.e., of how I can know the mind of another person. The mechanism for knowing oneself (self-awareness) is the same as the mechanism for knowing others" (Vygotsky, 1925, p. 275).

The term "Theory of Mind (ToM), a concept with considerable overlap with reflective functioning, entered the literature as a name for a concept which covers part of the same ground as reflective functioning in 1978, with the publication of an article entitled "Does the chimpanzee have a theory of mind?" (Premack & Woodruff, 1978), which suggested that chimpanzees had the ability to understand the goals of human beings in particular situations. This gave rise to considerable controversy, resulting in the proposal of a number of possible tests of theory of mind, including false belief tasks (Flavell, 2004).

Since that time, considerable effort has been expended by social cognition researchers in attempting to measure and explore the concept of theory of mind, using a wide variety of tools. These include the Reading the Mind in the Eyes Test – Revised (Baron-Cohen, Wheelwright, Hill, Raste, & Plumb, 2001), the Imposing Memories Task (Kinderman, Dunbar, & Bentall, 1998), the Movie for Assessment of Social Cognition (MASC: Dziobek, et al., 2006), several false belief tasks, and many others. The aspects of functioning tapped by these measures seems to vary widely, with some tapping mainly cognitive aspects of mentalizing (e.g. false belief tasks), some tapping mainly emotion recognition (e.g. Reading the Mind in the Eyes) and others tapping multiple aspects of mentalizing, both cognitive and emotional (e.g. the Movie for Assessment of Social Cognition).

Within the psychodynamic tradition, reflective functioning also has a long history. While reflective functioning has been brought into focus over the last decade and a half as an extension of attachment theory (Fonagy, 1998b), it has a separate history which predates the association with attachment. Early uses of the term mentalization had qualitatively different connotations than some of the more recent uses. For example, the French psychoanalyst and psychosomatic specialist, Pierre Marty, was using the term in the early 1960s to refer to the process of transforming drives, sensations and affects into mental representations, and the

process of symbolising them through fantasy and imaginative mental activity, as opposed to somatising them (Marty & Michel, 1963). This version of the concept of was further developed by Luquet (1981) to imply an endless, ongoing transformation of mental contents from one form of representation to another, particularly involving, but not restricted to, language and creative thought.

While the views of the French psychoanalysts discussed above clearly differs from the narrower concept known as theory of mind, it has been argued that theory of mind is a subset, and consequence of this more all-encompassing view of mentalization (Lecours & Bouchard, 1997). This version of the concept of mentalization also overlaps considerably with Bion's concepts of maternal reverie and alpha function (Bion, 1970/2012).

The psychoanalytic tradition and the social cognitive tradition have intersected in the work of Peter Fonagy and his colleagues, who have brought together these concepts, plus cognitive concepts of working memory and more recently, neurobiological research, within their particular version of the concept of mentalization, which they have called reflective functioning (RF). Fonagy and colleagues see reflective functioning as involving "the imaginative mental activity that enables us to perceive and interpret human behavior in terms of intentional mental states (e.g., needs, desires, feelings, beliefs, and goals)" (Fonagy & Luyten, 2009, p. 1357).

Mentalization, under the name reflective functioning, has been operationalized by Fonagy's group of researchers, initially by means of a modification of the metacognition scale of the adult attachment interview (Fonagy, Fearon, Steele, & Steele, 1998). The use of two separate terms, mentalization and reflective functioning, to describe the same concept may at times be confusing. The recent shift from the noun, "mentalization", to the participle, "mentalizing" may have added to the confusion. The terms "reflective function" and "reflective functioning" are also used interchangeably. For all practical purposes, mentalization, mentalizing, reflective function and reflective functioning are effectively

synonyms. Throughout this study, the term "reflective functioning" will be preferred, and can be taken to also mean the other terms described above. Reflective functioning is hypothesised to develop during childhood, particularly during the preschool years. "Reflective function allows the child to step beyond immediate experience (physical reality) and to try to identify the mental state that might underpin the observed behavior of the caregiver" (Fonagy, 1998a, p. 152). This corresponds to the views of social cognition researchers regarding the development of ToM. Reflective functioning is described as being different from introspection, in that it is said to operate automatically rather than consciously, as a part of implicit or procedural memory. "We assume that an individual's internal working model of relationships may, to a greater or lesser degree, incorporate mental states in the representations of self-other interactions ... Thus assumptions concerning mental states are made automatically and nonconsciously in the interpretation of the behavior of the other in an attachment context and the response of the self to these actions" (Fonagy, 1998a, p. 152). Nevertheless, other descriptions of mentalizing or reflective functioning sound less implicit than this, and in fact Allen (2003) makes the distinction between mentalizing explicitly and mentalizing implicitly as two distinct processes.

7.3 Reflective functioning and the development of attachment security

Reflective functioning is seen as playing a key part in the unfolding of attachment security, although, in Fonagy's evolving conceptualisation, attachment and reflective functioning are now seen as "loosely coupled" (Fonagy & Bateman, 2006, p. 420). One aspect of this coupling is reflected in the observation that securely attached children develop reflective functioning earlier than less securely attached children (Fonagy & Bateman, 2006), which has been interpreted as meaning that the development of reflective functioning assists in the development of secure attachment.

Secure attachment in children is seen as being facilitated by the quality of parental reflective functioning, and indeed, the capacity of mothers to mentalize, as measured by the reflective functioning scale scoring of the Adult Attachment Interview, has been found to be significantly correlated with the attachment status of their children, as measured by the Strange Situation (Fonagy, Steele, Steele, & Moran, 1991). Thus, reflective functioning is thought to mediate between the internal working model of the parent and the attachment status of the child. In addition, reflective functioning has been found to mediate the relationship between experiences of abuse and the development of borderline personality disorder, in that persons with a history of abuse and low reflective functioning are most at risk of developing the disorder (Fonagy, et al., 1996).

Mediation somewhat similar to that considered to occur between parent and child is thought to take place in the process of psychotherapy: The therapist's mentalizing in a way that fosters the patient's mentalizing is seen as a critical facet of the therapeutic relationship and the essence of the mechanism of change. According to Fonagy and Bateman (2006, p. 415), the crux of the value of psychotherapy is the experience of another human being's having the patient's mind in mind.

Another way of looking at the mediating functions of mentalizing is to see it as providing a protective function (Eagle, Wolitzky, Obegi, & Berant, 2009). Specifically, mentalizing is seen as protecting a person from the potentially harmful effects of attachment trauma in earlier life. In other words, reflective functioning is a source of psychological resilience. In this sense, the concept of mentalizing provides an important bridge between the relative focus on external events and interactions in much of Bowlby's work, as well as the work of social psychologists, and the emphasis on fantasy and internalised meanings that has been characteristic of much of psychoanalysis over the years.

7.4 Mentalized affectivity

Reflective functioning is also seen as having considerable overlap with empathy, a concept which has a long history of investigation in relation to psychotherapy process (Decety & Meyer, 2008). Perhaps the greatest overlap involves the aspect of mentalizing known as mentalized affectivity (Bouchard, et al., 2008). Mentalized affectivity is the aspect of reflective functioning that involves reflecting on the meaning of affective states, and as such, is also seen as intimately involved in the process of affect regulation (Jurist, Meehan, Obegi, & Berant, 2009). Thus, this concept extends empathy in the direction that the concept has been taken since the time of Rogers by some of those who have carried on his tradition (Pos, et al., 2008).

7.5 The social biofeedback theory of parental affect-mirroring

Drawing together considerable data regarding the development of infants during the first year of life, and seeking to bridge controversies regarding the manner in which reflective functioning operates, and the manner in which emotional processing develops, Gergely and Watson (1996) proposed that infants depend on the ability of their caregivers to provide a reflection of the infant's internal affective state, so that the infant can learn to understand and regulate emotions. They described this as being similar to the way in which adults can learn, via biofeedback, to control internal states such as blood pressure, over which they normally have no direct conscious control. They concluded, therefore, that parental affect-mirroring acts as a type of "natural social biofeedback training" that is crucial to the emotional development of the infant, and that the basis on which the infant is able to learn from the available affect-mirroring is a possibly innate faculty attuned to contingency detection. Gergely and Watson go on to propose that the infant distinguishes the parental "mirroring" of the baby's own emotional states from the parent's expression of the parent's own emotional state on the basis of what they call the "markedness" of the expression. Markedness means

"producing an exaggerated version of the parent's realistic emotion expression, similarly to the marked 'as if' manner of emotion displays that is characteristically produced in pretend play" (Gergely & Watson, 1996, p. 1198). They refer to the process involved as "referential decoupling".

This theory is related to reflective functioning in that it is hypothesised that parental reflective functioning is a necessary factor in the provision of appropriate marked affective mirroring. It is also hypothesised that the provision of such mirroring facilitates the eventual development of reflective functioning in the child. Considerable study of this area has been subsumed within the concept of "maternal mind-mindedness", a concept which appears to be essentially another name for parental reflective functioning (Demers, Bernier, Tarabulsy, & Provost, 2010; Laranjo, Bernier, & Meins, 2008; Meins, 1999; Meins & Fernyhough, 1999; Sharp & Fonagy, 2008).

7.6 Measures of mentalization or reflective functioning

A number of different ways of measuring the concept of mentalization have been developed as a result of the different traditions from which the concept has evolved. These include the Reflective Functioning (RF) scale (Fonagy, Target, Steele, & Steele, 1998), the Grille de l'Élaboration Verbale des Affects (GEVA: Lecours, Bouchard, St-Amand, & Perry, 2000), the Mental States Rating System (MSRS: Bouchard, Audet, Picard, Carrier, & Milcent, 2001) the Movie for Assessing Social Cognition (MASC: Dziobek, et al., 2006), the Reflective Functioning Questionnaire (Fonagy, P., et al., 1998), the Mentalizing Stories Test for Adolescents (MSTA: Vrouva & Fonagy, 2008; Vrouva & Fonagy, 2009), Stories from Everyday Life (Kaland, et al., 2002) and many others, some of which focus purely on cognitive aspects of mentalization, and others of which focus mainly on affective aspects of mentalization.

7.6.1 The reflective functioning (RF) scale

The Reflective Functioning (RF) scale (Fonagy, P., et al., 1998) is used to score transcripts of Adult Attachment Interviews (Main & Goldwyn, 1984) for reflective functioning. It has also been adapted for scoring of the Parent Development Interview (PDI: Slade, et al., 1999). The scale is applied by raters, who are required to apply definitions and descriptions of categories of reflective statements to rank the participant's AAI transcript on a scale from 1 to 9. Raters are required to be trained, and to have been certified as reliable. The reliability of the RF scale using trained raters is reported as being typically between r = 0.81 and r = 0.94 (Bouchard, et al., 2008).

Although the RF scale has been used in a large number of studies, it has the practical problem of requiring an Adult Attachment Interview to be conducted, which requires time and training, and is time consuming. In addition, raters must then be trained to use the RF scale, an additional expensive and time-consuming exercise. It is also important to note that "the adult attachment interview (AAI) will only yield an indication of a potential for mentalization, which may or may not be fulfilled depending on the context" (Fonagy, et al., 2011, p. 105).

7.6.2 Grille de l'Élaboration Verbale des Affects (GEVA)

The Grille de l'Élaboration Verbale des Affects (GEVA: Lecours, 1995) is a method for rating the transcript of an interview in terms of the extent to which affects are clearly articulated in the text. This measure has been developed out of the theoretical tradition of mentalization theory developed by the French psychoanalysts, such as Pierre Marty (cf. Marty, 1991; Marty & Michel, 1963). Within this tradition, affect is conceptualised as an initially largely somatic experience involving an action tendency, which is socialised into mental representations through the process of mentalization, which involves transforming the

experiences into mental representational networks of ever increasing complexity (Bouchard, et al., 2008; Lecours, 2007; Lecours & Bouchard, 2011).

7.6.3 The Mental States Rating System

The Mental States Rating System (MSRS: Bouchard, et al., 2001) is a method for analysing the content of transcripts of interviews. The MSRS, which requires extensive training of the coders, divides the material into three main categories: the reflective mental state, the objective mental state and the reactive mental state. The reflective mental state involves self-perception and self-analysis relating to affects, cognitions and interpersonal relations. The objective mental state is one in which the person is an observer of, rather than a participant in, internal states. The reactive mental state is one in which the person neither reflects nor observes, but reacts. Each of these mental states is further divided into subcategories.

7.6.4 The movie for assessing social cognition (MASC)

One of the more recent measures developed from within the social cognition field, which seems to involve a reasonably even emphasis on both cognitive and affective aspects of mentalization is the Movie for Assessing Social Cognition (MASC: Dziobek, et al., 2006). This consists of a movie about four friends getting together for a dinner party, with very different motivations and goals, involving subtle nuances within their interaction. The movie is stopped multiple times, and the person being assessed is asked questions about the motivations, feelings and intentions of the various characters. While this assessment task has been very successful so far in distinguishing between person's with Asperger's syndrome and normal controls, it seems likely to find further application in the assessment of the capacity for reflective functioning in other contexts. The audio-visual medium used gives scope for the inclusion of both verbal and non-verbal aspects of reflective functioning, and the subtle nuances of character interaction gives scope for the exploration of explicit and implicit

aspects of reflective functioning. The reported internal consistency of the instrument is r = 0.84, and the reported test-retest reliability is r = 0.97 (Dziobek, et al., 2006).

The movie is specifically designed to tap the subject's understanding of the thoughts, emotions and intentions of the characters, thus tapping both cognitive and affective aspects of mentalization. Thus, it appears that this measure covers all aspects of reflective functioning with regards to the other. However, it does not appear to cover mentalization with regards to the self, and may therefore be more a measure of empathy than reflective functioning. Nevertheless, given that the role of the psychotherapist is to help the other, mentalization regarding the other may be of greater relevance to the current study than mentalization regarding the self. Interestingly, psychotherapists have been found to score significantly higher on the MASC than matched controls, despite the fact that the range of scores for both groups on the MASC were similar (Hassenstab, Dziobek, Rogers, Wolf, & Convit, 2007). The MASC has recently become one of the tools used for assessing mentalization as part of the mentalization-based treatment program at the Menninger Clinic (Sharp, et al., 2009).

7.6.5 The reflective functioning questionnaire

This questionnaire, attributed to Fonagy, Target, Steele, and Steele (1998), is currently used as part of the Menninger Clinic assessment protocol (Sharp, et al., 2009), and appears to be a self-report measure developed and discarded along the way to the development of the Reflective Functioning Scale. It involves rating statements such as "If I feel insecure I can behave in ways that put other's backs up" and "People's thoughts are a mystery to me". Other than the Menninger Clinic article, the only other mention of its existence is a reference in a poster presentation given at the 10th International Congress Of The International Neuropsychoanalysis Society (Nolte, Fonagy, Blatt, & Rutherford, 2009), which refers to it as "(under development, Fonagy et al.)", and no information about its psychometric properties appears to be currently available.

7.6.6 The mentalizing stories test for adolescents (MSTA)

This 21-item self-report measure consists of brief vignettes accompanied by a picture, followed by multiple-choice answers about them (Rutherford, et al., 2012; Vrouva & Fonagy, 2008; Vrouva & Fonagy, 2009; Vrouva, Target, & Ensink, 2012). The majority of the vignettes describe negative interactions between an adolescent and someone else. Two of the vignettes describe stories that do not involve mental states. These are aimed at testing reading comprehension or attention to task, to provide a comparison for evaluating answers to the other questions. Each of the vignettes is followed by a question with multiple answer options. For the stories aimed at testing reflective functioning, the multiple choice answers include one answer that represents an appropriate reflective response to the question. The other possible questions include one answer that is seen as defensively evasive and based on physical reality rather than mental states. One of the answers includes excessive blaming of the other in the story. Another of the answers is focussed on self-blame, involving blame of the protagonist in the story (Vrouva, et al., 2012). The MSTA is described as assessing both mentalizing and pseudomentalizing (Sharp, et al., 2009).

7.6.7 The interpersonal reactivity index (IRI)

The Interpersonal Reactivity Index (Davis, 1980), is a 28-item, self-report, multidimensional measure of empathy. It has four subscales: perspective-taking (PT), Fantasy (FS), Empathic Concern (EC) and Personal Distress (PD). Of these, the first two may be particularly relevant to reflective functioning. Perspective-taking involves adopting another person's psychological point of view, which is an important facet of reflective functioning. The Fantasy (FS) scale measures the extent to which people "transpose themselves imaginatively into the feelings and actions of fictitious characters in books, movies, and plays" (Davis, 1983). The internal consistency reported for the IRI is $r = 0.79$ and construct

validity has been demonstrated through adequate correlations with other measures of empathy (Davis, 1980).

7.6.8 Stories from everyday life

The Stories from Everyday Life test is comprised of 26 short stories, followed by comprehension questions. The stories, between them, include the following elements: figures of speech, lies, white lies, empathy, misunderstandings, double bluffs, irony or sarcasm, persuasion, contrary emotions, forgetting, jealousy, intentions and social blunders. The comprehension questions include a number of control questions, plus questions involving inferences about physical states, and questions involving inferences about mental states. Reported inter-rater reliability ranges from kappa = 0.76 for physical inference to kappa = 0.87 for mental inference (Kaland, et al., 2002).

The Stories from Everyday Life have been mainly used in research related to Asperger's Syndrome and high-functioning autism. However, since they are described as "advanced" tests of theory of mind, and many other tests originally used with the autism spectrum have later been used in psychotherapy research, this test may bear further investigation. The main drawbacks of this test would seem to be its length, and the necessity of training raters.

7.6.9 The experiencing scale

Developed out of the intersection between Carl Rogers' client-centered therapy and Eugene Gendlin's experiential theories, the Experiencing Scale (Klein, Mathieu, Gendlin, & Kiesler, 1969) is designed to capture "the extent to which inner referents become the felt data of attention, and the degree to which efforts are made to focus on, expand and probe those data" (Klein, Mathieu-Coughlan, Kiesler, Greenberg, & Pinsof, 1986, p. 21). Ratings of client experiencing have been found to be correlated with positive outcome in a wide variety of studies using a wide variety of therapies (Watson & Bedard, 2006). Reported inter-rater

reliabilities for peak ratings range from r = 0.61 to r = 0.93, and for modal ratings they range from r = 0.65 to r = 0.95 (Klein, et al., 1986). The majority of studies (12 of the 15) report reliabilities in the r = 0.81 to r=0.95 range.

In terms of reflective functioning, the construct of experiencing appears to be largely about mentalizing with regards to the self, both explicitly and implicitly. It is arguable that it also covers both cognitive and affective aspects, although the wording often used in discussing the concept might lead some to see the emphasis as perhaps more on the affective than the cognitive. "The Experiencing Scale attempts to measure the process of focusing inward in order to solve problems, and the conceptualization of experiencing merges affective and cognitive processes into an integrated whole" (Aron, 2000, p. 678). Thus, the experiencing scale attempts to measure the process involved in self-reflexive mentalizing, a process that involves a movement from implicit and preverbal aspects of knowing to verbal and symbolic expressions of reflectivity. Since the Experiencing Scale can be used to rate a variety of materials ranging from full audio-visual content to transcriptions, the extent to which the scale taps non-verbal aspects of mentalizing presumably varies according to the medium to which it is applied, and would be expected to be greatest for material containing both auditory and visual content.

7.7 Criticisms of the reflective functioning (RF) concept

The concept of mentalizing and its operationalization as reflective functioning have been criticized for ignoring non-verbal and dyadic aspects of interaction (Kotov, 2003). In fact, under the current procedure for assessing reflective functioning, it would not be possible for the reflective functioning scale to take account of non-verbal communication, since it is scored from written transcripts of the Adult Attachment Interview. Kotov is concerned about the need to take account of the "non-verbal, presymbolic underpinnings" (p. 3) of reflective functioning, and suggests that Fonagy and his colleagues "imply the superiority of reflection

over experience" (p. 44) in a manner that excludes important aspects of what is involved. She goes on to say that “although they believe that RF is comprised in some way by unconscious material, Fonagy and colleagues have operationalized RF primarily as a conscious, linguistic capacity” (p. 53) . Reflective functioning is seen as growing out of the attuned relationship between caregiver and infant, which begins before the infant has developed the capacity for language, and is therefore largely non-verbal. Kotov draws attention to the ways in which the caregiver unconsciously ascribes mental states to the child, while helping to contain the child’s potentially overwhelming affects, and emphasises the extent to which most of this happens implicitly, and outside of the conscious awareness of the caregiver. She also emphasizes that, while language clearly plays a significant part in this development, its role is built on top of a foundation laid down largely in non-verbal, implicit ways, and that what is communicated and symbolized linguistically is modified, given depth, and sometimes significantly altered, by the non-verbal communication that accompanies it, whether that be conveyed by gesture, tone of voice, facial expression, body posture, or subtle combinations of all of those. The fact that the non-verbal elements are excluded from AAI transcripts is, according to Kotov, one of the main reasons why the instructions for the reflective functioning scale ask the scorer to exercise “clinical judgement”. What is meant by this, in Kotov’s view, is that the scorer needs to exercise his or her own reflective functioning in such a way as to intuit some of the information that is missing in the transcript. In fact, Kotov emphasises the role of reflective functioning not only in scoring the reflective functioning scale, but also in administering the adult attachment interview, and implies that the reflective functioning score achieved by a participant will be a function not just of their own reflective capability, but also of that of the interviewer and scorer. This may be an explanation for the large amount of training and reliability testing required in order for a person to become certified as competent at administering and scoring both the AAI and the reflective functioning scale.

In her analysis of reflective functioning, the emphasis Kotov gives to the non-verbal and dyadic aspects of the concept underlines its considerable overlap with the concept of Goal-Corrected Empathic Attunement (GCEA: McCluskey, 2005) . GCEA is a concept described as linking attachment theory, affect attunement, as described by Stern, and empathy (McCluskey, Hooper, & Miller, 1999). The term "goal-corrected" derives from Bowlby's discussion of the goal-corrected relationship which develops in a securely attached caregiver-infant dyad, as the infant learns to take account of the goals of the caregiver, in addition to their own goals (Bowlby, 1988). This sounds very much like reflective functioning.

Kotov's analysis is also suggestive of overlap between reflective functioning and the concept of experiencing. Experiencing, a concept developed by Eugene Gendlin out of his work with Carl Rogers, is about felt inner perception. To the extent that attention is focussed on felt inner referents and a person is able to attend to, probe and expand the data they contain, they are able to become aware of aspects of their inner functioning that would otherwise remain hidden (Klein, et al., 1986). This "felt sense" is arguably the presymbolic, nonverbal aspects of reflective functioning to which Kotov is referring.

Other researchers have also been critical of the reflective functioning scale. The scale has been criticized for its reliance on the Adult Attachment Interview, which is seen as a practical limitation to its usefulness (Hill, Levy, Meehan, & Reynoso, 2007), particularly in view of the length of time taken to conduct and transcribe the AAI, not to mention the extensive time and expense involved in training and achieving reliability. Concern has also been expressed regarding the fact that it yields only a single score, for what can arguably be seen as a multidimensional construct (Meehan, 2009). Researchers from the group who originally developed the reflective functioning scale have also noted aspects of reflective functioning which it does not tap. For example, although it has been made clear that a person may mentalize well with regards to one type of affective experience and poorly with regards

to another, the reflective functioning scale fails to capture this distinction (Fonagy, et al., 2011).

Reflective functioning appears to be a concept that crosses the boundaries between social psychology, cognitive psychology, psychoanalysis, and attachment theory. Multiple measures of different versions of the concept have been developed over the years, with some of them laying more emphasis on cognitive aspects of the process, and others laying more stress on affective components of the process. In addition to cognitive and affective aspects, other key aspects are mentalizing regarding self and mentalizing regarding others. Also of interest are questions regarding how much explicit versus implicit mentalizing is tapped, and the question of whether the focus is purely on verbal aspects of mentalizing, or whether non-verbal aspects are taken into account although it does seem likely that there may be some degree of overlap between the explicit/implicit and the verbal/non-verbal dimensions.

7.8 Reflective functioning and temperament

The social biofeedback theory of parental affect-mirroring draws attention to the crucial role of environment in the development of reflective functioning. Nevertheless, environment presumably has to work in conjunction with the basic material supplied by heredity. One aspect of that basic material is executive functioning. While most investigation of reflective functioning has explored the environmental contribution, studies of theory of mind, a concept partially synonymous with and partially overlapping reflective functioning, have explored the role of executive functioning in the process of developing theory of mind for more than 20 years (cf. Russell, Mauthner, Sharpe, & Tidswell, 1991). More recently, brain pathways involved in theory of mind and executive functioning have been demonstrated by means of imaging to be essentially the same (Perner & Lang, 2000). In view of the fact that traditional theory of mind overlaps the cognitive, but not the affective component of reflective functioning, it is interesting to note that executive functioning has more recently been divided

into “cool”, or cognitive, and “hot”, or affective, types (Hongwanishkul, Happaney, Lee, & Zelazo, 2005; Talwar, Carlson, & Lee, 2011). Whereas “cool” executive functioning has been found to be related to temperament, “hot” executive functioning seems not to be clearly related to temperament or intelligence (Ensink & Mayes, 2010; Hongwanishkul, et al., 2005).

A study of 1,116 same sex twins, 49% male, 56% monozygotic and 44% dizygotic, in which the twins were measured at age 5 for theory of mind, found that 15% of the variance in theory of mind scores was accounted for by genetic factors which affected verbal ability, 21% of the variance was accounted for by shared environmental factors that affected verbal ability, 20% of the variance was accounted for by shared environmental factors which affected theory of mind independently of verbal ability and 44% of the variance was due to non-shared environmental factors which affected theory of mind independently of verbal ability (Hughes, et al., 2005). Theory of mind was examined using four questions that assessed the child’s ability to attribute a false belief to a character in a story, followed by four questions that assessed the child’s ability to make inferences from a false belief attributed to a character in a story. These are fairly standard theory of mind tasks and probably assess more cognitive than affective components of theory of mind. The extent to which this study can be extrapolated to the overlapping concept of reflective functioning is unclear, but is seems likely that the study is pertinent to at least the cognitive component of reflective functioning. On the basis of the preceding paragraph, the affective component might be expected, if anything, to have a smaller genetic component.

7.9 Reflective functioning, attachment, and therapist effectiveness

As has been discussed, reflective functioning is believed to mediate between the internal working model of the parent and the attachment status of the child (Fonagy, et al., 1996). Therefore, to the extent that the efficacy of the therapeutic relationship is dependent

on providing an attachment situation that facilitates the revision of patient internal working models, it should be expected that therapist mentalizing will mediate between the internal working model of the therapist and the attachment status of the patient within the therapeutic relationship.

One study discussed already in Chapter 6 looked at both patient and therapist reflective functioning (Diamond, et al., 2003). In that study, therapist reflective functioning was scored on the patient-therapist adult attachment interview (PT-AAI), rather than on the AAI. The study reports the therapist RF in relation to the patient about whom the therapist was interviewed, rather than in relation to the therapist, so that we do not generally get from the paper a clear idea as to which RF scores belong to the same therapist. One therapist who saw three of the ten patients is, however, clearly identified in the text. That particular therapist was assigned RF scores of 3, 6 and 7 in relation to the interviews with the three patients, demonstrating considerable variability in RF depending on the person about whom the therapist was interviewed (assuming consistency in the scoring of RF across the interviews). Since therapists were not given the AAI, the scores for RF on the PT-AAI cannot be compared with therapist RF more generally. Although a case-study approach was taken because the sample size was too small to permit statistical analysis, for the remaining four therapists and seven patients, the paper does not make clear which RF scores belong to which therapists. It is clear that this study does not answer the question of the relationship between therapist RF and therapist effectiveness. Nevertheless, it does suggest that such a relationship is likely. In this study, in every case in which a therapist scored 4 or above for reflective functioning on the PT-AAI, the client's RF measured on the AAI increased between the two AAIs conducted before and after 12 months of therapy. However, the fact that the study included only 10 patients and 5 therapists limits the conclusions that can reasonably be drawn.

The role of therapists' reflective functioning in their approach to therapy has been further investigated in a qualitative study involving UK counselling psychologists who were given AAIs and also interviewed about their counselling practices and their own personal therapy (Rizq, 2011; Rizq & Target, 2008, 2010a, 2010b). The study involved 12 therapists, 9 of whom were female. RF scores for the 12 therapists ranged between 0 and 8.

> Accounts of clinical work from participants with negative, low or questionable levels of RF, most of whom were insecurely-attached, noticeably included descriptions of how they tended either to discount or distance themselves from strong feelings, or, alternatively, become overwhelmed or paralysed by their clients' in-session behaviour. These apparent difficulties in managing feelings and process issues within clinical work, which can be seen as regulatory strategies characteristic of the avoidant/dismissive or resistant/preoccupied attachment categories respectively, were often mirrored in the interview process itself, where the interviewer struggled to persuade participants to stay with, or think about these clinical problems. By contrast, accounts from participants with ordinary or marked levels of RF were far more likely openly to discuss problematic aspects of themselves that they had worked on in therapy, and appeared eager to use the interview to reflect on how this had helped them to tolerate and work with these same aspects now identified in their clients (Rizq & Target, 2010a, p. 476).

Although the quote above suggests that RF may well be associated with therapist effectiveness, the authors also report one therapist with high RF who is highly anxious and convinced that she is hopeless as a therapist. They conclude from this that "high levels of mentalisation may not *always* be beneficial to clinical work" (Rizq & Target, 2010a, p. 475).

Given that attachment and reflective functioning are seen as "loosely coupled" (Fonagy & Bateman, 2006, p. 420), and reflective functioning is seen as a key part of the process of transmission of attachment, the fact that associations of any description have been found between therapist attachment and indicators of therapeutic progress makes it highly likely that there is a role for reflective functioning in this process. Furthermore, it has been argued extensively that the key ingredient in the process of change in psychotherapy is the therapist

mentalizing in such a way as to facilitate growth in the patient's ability to mentalize (Fonagy & Bateman, 2006). If this is the case, then therapist reflective functioning should be a key variable for examination in the study of the process of psychotherapy. Again, few studies have explored this relationship.

7.10 Summary

Like attachment, reflective functioning is a concept with multiple roots. It has roots in attachment theory, roots in psychoanalysis, roots in cognitive science and roots in social psychology. Reflective functioning overlaps a number of other concepts, including empathy, theory of mind, mind-mindedness, metacognition, psychological mindedness and perspective taking. The boundaries between these concepts are somewhat fuzzy, which adds to the difficulties involved in measuring reflective functioning. At present, the best established means for measuring reflective functioning is using the RF scale to score the adult attachment interview, which is time consuming and therefore costly. A number of other candidate methods for assessing reflective functioning are at varying stages of development, but none of these is sufficiently established to replace the RF scale at this point. The next chapter will bring together the discussion so far into a proposal for testing the dual propositions that therapist reflective functioning and therapist attachment are implicated in therapist effectiveness.

CHAPTER 8

THE CURRENT STUDY

8.1 Rationale for this study

Chapter 2 of this thesis explored in detail the concept of psychotherapeutic effectiveness, both from the standpoint of theoretical considerations and from the standpoint of previous research into the topic. It highlighted the current lack of an adequate explanation for demonstrated differences between therapists in terms of effectiveness.

After briefly reviewing evidence for the efficacy of psychotherapy, Chapter 3 examined the debate about the role of specific and common factors in the effects of psychotherapy. It reported research suggesting that the concepts of adherence and competence, which are central to the possible role of specific factors, do not contribute in any significant fashion to the effectiveness of psychotherapists.

Beginning with an examination of previous research into other factors thought likely to explain differences in therapist effectiveness, Chapter 4 critically explored the work of Carl Rogers and associates. In doing so, it delved into the question of the predictors of the Rogerian facilitative conditions, and discovered that all of them were predicted by factors associated with attachment theory. In addition, it noted links between Rogers' concept of congruence and Gelso's concept of the real relationship. Furthermore, it found that Duquette had proposed reflective functioning as the mechanism by which the therapist facilitates the real relationship. It then examined the philosophical and theoretical basis of Rogers' theories and again discovered links to attachment theory. This led into a more detailed examination of attachment theory in Chapter 5. It was also suggested that reflective functioning might mediate the links between attachment and empathy reported in the research. It also noted links between the importance of agency in Rogers' work and the extent to which agency is

central to the concept of reflective functioning, which enables individuals to interpret experience on the basis of human agency.

In Chapter 6, which examined existing research into the relationship between attachment and the therapeutic relationship, the idea that the provision of a secure base for the client is an essential aspect of therapy was examined. As a result, the proposal that, since securely attached parents are best at providing a secure base for their children, securely attached therapists will be most effective in helping their clients. It was also noted that reflective functioning is a prerequisite for providing a secure base and assisting in the change of internal working models. After examining explorations of attachment, the therapeutic alliance, and countertransference, the chapter concluded that preliminary support exists for a relationship between therapist attachment and therapist effectiveness, which is yet to be directly established.

Chapter 7 gave the history and theoretical background of the concept of reflective functioning, also known as mentalization and went on to examine the relationship between reflective functioning and the therapeutic process. After exploring the roots of reflective functioning in attachment theory, in psychoanalysis, in cognitive science and in social psychology, the chapter noted the overlap between reflective functioning and other concepts, such as empathy, which are already linked to therapist effectiveness, as well as its links with attachment theory, which has also been proposed as a candidate for explaining therapist effectiveness. The Chapter also reported a study by Diamond which, while not conclusive, strongly suggests a role for reflective functioning in therapist effectiveness.

So, in summary, we know that some therapists are more effective than others. We know that it is not because of gender, age, experience, or common personality variables. The evidence to date also strongly suggests that it is not because of adherence to particular techniques. The evidence also suggests that it is unlikely to be because of competence in the delivery of particular techniques. We do have evidence to suggest that facilitative

interpersonal skills are relevant. We have considerable evidence that the Rogerian triad of empathy, warmth and congruence, which partly overlap the concept of facilitative interpersonal skills, are relevant to therapist effectiveness. This paper has presented evidence connecting those concepts to attachment and to reflective functioning, and has further argued that reflective functioning is a good candidate for linking all of these factors. One of those factors, congruence, is a component of the "real relationship", for which the therapist's ability to mentalize is seen to be a critical factor (Duquette, 2010). Furthermore, as discussed in Chapter 4, given that cognitive complexity has been found to be highly correlated with both reflective functioning (Watson, 2009) and perceived empathy (Maniei, 1984), which is correlated with outcome, there is additional reason to expect that reflective functioning is implicated in therapist effectiveness. Since reflective functioning has not been studied as an explanation for therapist effectiveness, this study sets out to assess its possible role in that area.

Therefore, the main purpose of this study is to examine two proposed relationships. The first is between therapist reflective functioning and therapist effectiveness. The second is between therapist attachment status and therapist effectiveness. The rationale for each investigation is given below. In addition, this study seeks to examine several other areas of interest: the relationship between the MASC and the reflective functioning scale; the relationship of lower-order ECR factors to therapist effectiveness; and the relationship between reflective functioning and empathy.

8.1.1 Therapist reflective functioning and therapist effectiveness

As discussed in detail in Chapters 3 and 6, reflective functioning has significant overlap with the concept of empathy, which is known to be relevant to therapist contributions to the therapeutic process. Furthermore reflective functioning is a key factor in the transmission of attachment security between parents and children (Slade, 2005). Given the parallel between

parenting and psychotherapy implicit in the secure base hypothesis (Farber, Metzger, Obegi, & Berant, 2009), it makes sense to theorize that reflective functioning plays a part in effective therapy. In addition, it has been argued that mentalizing mediates between the internal working model of the therapist and the attachment processes of the patient within the therapeutic relationship and that a foundational change process in psychotherapy is the therapist mentalizing in such a way as to facilitate growth in the patient's ability to mentalize (Fonagy & Bateman, 2006). Therefore, therapists who have greater capacity for reflective functioning should have greater capacity to do facilitate this process.

Reflective functioning has been researched from the perspective of multiple paradigms, using varied tools, some of which mainly measure cognitive aspects of the construct, whereas others tap affective aspects. However, as with attachment, this research has mainly been focussed on reflective functioning by clients in psychotherapy and by parents in childrearing. It is therefore important to investigate therapist reflective functioning in psychotherapy in relation to therapeutic effectiveness.

8.1.2 Therapist attachment and therapist effectiveness

As demonstrated in Chapter 5, there is a body of evidence indirectly linking therapist attachment classification with outcomes via intervening variables such as the therapeutic alliance and countertransference. This evidence adds a degree of empirical support to theoretical reasons for expecting that attachment processes are involved in differences in effectiveness between therapists. One significant theoretical reason for expecting attachment to be relevant to therapist effectiveness is the proposal that an important common factor in therapy is that the therapist provides a secure base for the client (Farber, et al., 2009). When this is taken in conjunction with evidence that securely attached parents excel at providing secure bases for their children, it follows clearly that securely attached therapists should be

most effective in providing a secure base for their clients, and therefore more therapeutically effective.

A second reason for believing that attachment theory is relevant to therapeutic effectiveness comes from evidence linking attachment to the Rogerian triad of empathy, congruence and positive regard. This was discussed in detail in Chapter 4. Given that empathy, congruence and positive regard have the most research to date supporting any attributes as being relevant to therapist effectiveness, the link between attachment and those three attributes provides a second strong reason for proposing a link between therapist attachment and therapist effectiveness. Since investigations thus far have only assessed the relationship between attachment and therapist effectiveness indirectly, it is important to assess the relationship directly.

8.2 Model

Based on the literature reviewed in the preceding chapters, the model that appears most likely to explain therapist effectiveness is indicated diagrammatically in Figure 1, below. This study examines only the elements below the dotted horizontal line.

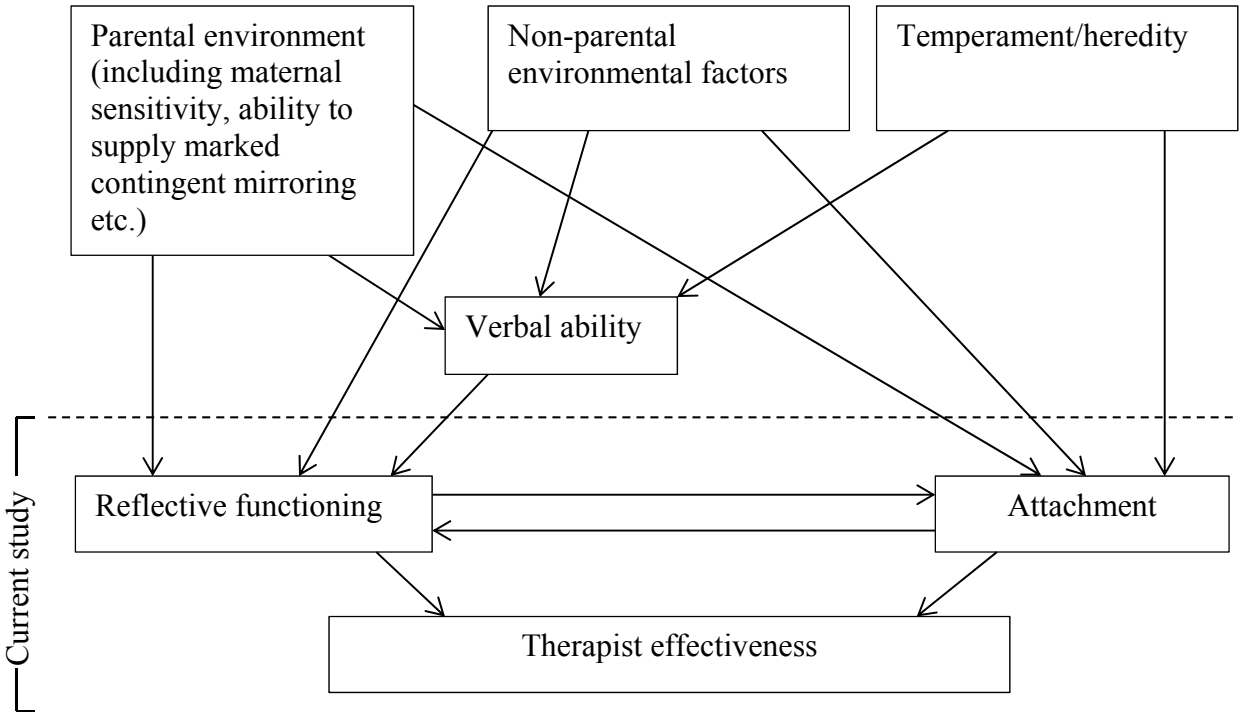

Figure 1. Hypothesised relationships between environment, temperament, therapist attachment, therapist reflective functioning and therapist effectiveness

8.3 Research Hypotheses

The hypotheses are given below in the general terms that are relevant at the theoretical level. The hypotheses are restated in study-implementation specific terms under operationalization.

8.3.1 Hypothesis One

Greater levels of therapist reflective functioning will be associated with greater therapist effectiveness.

8.3.2 Hypothesis Two

Greater levels of therapist attachment security will be associated with greater therapist effectiveness.

8.4 Operationalization

8.4.1 Hypothesis One

Therapist reflective functioning is measured by scoring therapist adult attachment interviews for reflective functioning. Additionally, the Movie for Assessing Social Cognition (MASC) is used as an exploratory further measure of mentalization and the IRI, a self-report measure of empathy, which includes a subscale for perspective taking, is used as a further triangulation of the concept.

Therapist effectiveness is measured by collecting an outcome measure at each therapy session from each therapist's clients. Therapist effectiveness is inferred from the aggregate slope of the trajectories of outcome measures for that therapist's clients. Thus, in operational terms, the first hypothesis can be stated:

H1a: therapist RF scores significantly predict therapists' clients' OQ-45 slopes with the direction of prediction being that higher therapist RF scores predict greater negative OQ-45 slopes (i.e. greater improvement). This is the main hypothesis.

H1a-0: RF scores have no significant association with therapists' clients' OQ-45 slopes.

Two further supplementary hypotheses are put forward:

H1b: therapist MASC scores significantly predict therapists' clients' OQ-45 slopes with the direction of prediction being that higher therapist MASC scores predict greater negative OQ-45 slopes (i.e. greater improvement).

H1b-0: MASC scores have no significant association with therapists' clients' OQ-45 slopes.

H1c: therapist IRI total score significantly predicts therapists' clients' OQ-45 slopes with the direction of prediction being that higher therapist IRI scores predict greater negative OQ-45 slopes (i.e. greater improvement).

H1c-0: IRI scores have no significant association with therapists' clients' OQ-45 slopes.

8.4.2 Hypothesis Two

Therapist attachment is measured in two ways. The dimension of attachment captured by self-report measures is measured by asking therapists to complete the Experiences in Close Relationships scale (ECR). The dimension of attachment captured by interview is measured by conducting Adult Attachment Interviews (AAI) with each therapist.

As with hypothesis one, therapist effectiveness is measured by collecting an outcome measure at each therapy session from each therapist's clients. Therapist effectiveness is

inferred from the aggregate slope of the trajectories of outcome measures for that therapist's clients.

Since two different methods of assessing attachment are used, one by self-report and one by interview and the first of those yields scores about attachment anxiety and attachment avoidance, from an operational point of view, hypothesis two is actually three separate hypotheses:

H2a: therapist ECR anxiety scores significantly predict therapists' clients' OQ-45 slopes with the direction of prediction being that lower therapist ECR anxiety scores predict greater negative OQ-45 slopes (i.e. greater improvement)

H2a-0: ECR anxiety scores have no significant association with therapists' clients' OQ-45 slopes

H2b: therapist ECR avoidance scores significantly predict therapists' clients' OQ-45 slopes with the direction of prediction being that lower therapist ECR avoidance scores predict greater negative OQ-45 slopes (i.e. greater improvement)

H2b-0: ECR avoidance scores have no significant association with therapists' clients' OQ-45 slopes

H2c: therapist AAI security scores, as calculated on the basis of the discriminant function reported by Waters et al. (2005), significantly predict therapists' clients' OQ-45 slopes with the direction of prediction being that lower therapist ECR anxiety scores predict greater negative OQ-45 slopes (i.e. greater improvement)

H2c-0: therapist AAI security scores have no significant association with therapists' clients' OQ-45 slopes

8.5 Supplementary Research Question

8.5.1 The relationship between the MASC and the reflective functioning scale

The MASC was developed in order to differentiate between autistic and non-autistic persons (Dziobek, et al., 2006). However, it has also been suggested that it measures cognitive and emotional theory of mind (Montag, et al., 2009) and that it may measure reflective functioning (Fonagy, 2010). To date, no study has compared scores on the MASC with scores on the reflective functioning scale. Therefore, it is proposed that the correlation between the scores on the two instruments be tested in this study.

CHAPTER 9

METHOD

9.1 Participants

9.1.1 Therapists

A total of 25 therapists participated in the study. These were a subset of 88 therapists initially recruited. The 25 therapists included in the study were those for whom sufficient data for both therapist and clients were available. That is to say, therapists who failed to provide client data were excluded. The group of therapists included 16 students participating in postgraduate courses in clinical psychology at two tertiary institutions. It also included 9 therapists working in a university counselling centre. The therapists ranged in age from 24 to 56 years, with a median age of 39.5, and a mean age of 37.86. Years of experience ranged from 0 to 30, with a median of 5.5 and a mean of 7.29 years. Half of the therapists reported psychodynamic as their primary therapeutic orientation. A further 25% indicated a commitment to ACT. The next most prevalent orientation was integrative, with 15%, followed by humanistic/client-centred with 10%. The remaining 10% was evenly divided between CBT and "other". Four of the therapists were male. The remainder were female.

9.1.2 Clients

Data from 1001 clients were included in this study. The clients were unevenly distributed between therapists, with a range of between 4 clients and 209 clients per therapist, and a mean of 38.84 clients per therapist. For clients, no inclusion or exclusion criteria were applied, other than that the clients must have attended more than one session, and completed the OQ 45.2. Clients ranged in age from 15 to 64, with a mean age of 33.7. The gender balance in the client group was 67% females to 33% males. For those of the clients for whom such information was available, the main presenting problems were depression and anxiety,

with a smaller proportion of clients citing relationship issues, PTSD and drug or alcohol issues, as indicated in Table 1, below.

Table 1. Proportional representation of client presenting problems

Primary Presenting Problem Category	%
Depression/Grief	43%
Anxiety/stress	42%
Relationship Issues	9%
Other (Mainly PTSD/ Drug and Alcohol)	6%

Additional demographic information was only available for the subset of the sample comprising clients of the university psychology clinics. Where such information was collected, the vast majority of clients (80%), indicated that English was their first language. All clients had at least secondary education, with the majority (80%) having completed some form of tertiary education. More than three-quarters of the clients were in full-time employment, with the majority of the remainder being in part-time or casual employment. A small number (8%) were not in any employment.

9.2 Materials.

9.2.1 Measures for assessing therapists

9.2.1.1 Adult attachment interview (AAI).

The Adult Attachment Interview (AAI: George, et al., 1996), is a semi-structured interview of an hour or more's duration, covering experiences growing up and current reflections on those experiences. It explores an adult's early childhood experiences and the adult's perception of the influence of those experiences on later development. It is scored for attachment according to a protocol which emphasises the language used by the interviewee

and the ability of the interviewee to give a coherent, integrated account of the experiences, as well as the quality of the experiences themselves. The AAI scoring yields four attachment categories: secure, insecure-dismissing, insecure-preoccupied, and insecure-unresolved. The AAI has well-established construct and discriminant validity (Bakermans-Kranenburg & van Ijzendoorn, 2009; Crowell, Treboux, & Waters, 1999; Crowell, et al., 1996) and has been shown to yield results which are relatively stable over time (Crowell, et al., 2002).

In addition to the standard scoring for attachment, the AAI has also been regularly scored for reflective functioning (RF) according to a coding schemed developed by Fonagy, Target, Steele and Steele (1998). This scoring examines the extent to which the interviewee is able to mentalize, or reflect from differing viewpoints, on the material presented in the interview.

The adult attachment interviews with therapists were conducted by the main author of this paper. Interviews ranged in length from 53 minutes to 2 hours and 6 minutes, with a median of 1 hour and 29 minutes. Interviews were transcribed according to the protocol set out in the AAI manual and then emailed to the two trained coders, who rated them and returned their ratings by email.

Scoring the AAI for attachment and scoring the AAI for RF each require coders who have been trained and certified reliable according to internationally recognised standards. This study used two coders for RF, one of whom had been trained at the Anna Freud Centre in London and certified as reliable. The other coder had been trained in New York by Howard Steele and certified as reliable. For attachment, the AAIs were also scored by two trained coders, both of whom had completed a two week Adult Attachment Training Institute, followed by an 18 month reliability certification period. One of these coders was located in London and the other coder was located in Sydney.

9.2.1.2 *Movie for assessing social cognition (MASC).*

The Movie for Assessing Social Cognition (MASC: Dziobek, et al., 2006) is a 15-minute movie about four friends getting together for a dinner party, with very different motivations and goals, involving subtle nuances within their interaction. The movie is stopped multiple times, and the person being assessed is asked questions about the motivations, feelings and intentions of the various characters. The reported internal consistency of the instrument is r = 0.84, and the reported test-retest reliability is r = 0.97 (Dziobek, et al., 2006). This instrument was chosen for several reasons. As discussed earlier , both self-report and third party ratings have their issues. By presenting a video and having respondents rate the characters, a middle path between the two is chosen in which the abilities of the respondent are potentially assessed, in a similar manner to measures of empathic accuracy. Furthermore, since the AII is a time consuming instrument to use, it was hoped that, if it correlated in this study with RF as assessed on the AAI, the MASC might provide a more time-economical method of assessing RF for future applications.

9.2.1.3 ECR

The Experiences in Close Relationships scale (ECR: Brennan, et al., 1998), a 36-item self-report measure of attachment style, was created by factor analysing 60 self-report measure of attachment and selecting the two sets of 18 items that loaded the most on each of the two underlying factors, attachment anxiety and attachment avoidance. These items are rated on a 7-point Likert scale. Internal consistency for the anxiety subscale is reported as .94 and for the avoidance subscale as .91. Test-retest reliability for the anxiety subscales is reported as .90 and for the avoidance subscale as .91 (Fraley, et al., 2000). As is commonly done (Mikulincer & Shaver, 2007), the wording of items was modified to make the scale more relevant to the context. Thus, the words “romantic partner” were replaced with “people”, “someone”, “people I’m close to” as appropriate, to make the scale more relevant

to the therapy context rather than the romantic one. Where this would not have made sense, the word "partner" was retained, but the word "romantic" was dropped. See Appendix B for the exact wording used.

9.2.1.4 The Interpersonal Reactivity Index (IRI)

The Interpersonal Reactivity Index (Davis, 1980), a 28-item, self-report, multidimensional measure of empathy, has four subscales: perspective-taking (PT), Fantasy (FS), Empathic Concern (EC) and Personal Distress (PD). The internal consistency reported for the IRI is r = 0.79 and construct validity has been demonstrated through adequate correlations with other measures of empathy (Davis, 1980). The IRI was completed by 22 of the 25 therapists, as the decision to include the IRI was not made until after data had already been collected from the first 3 therapists.

9.3 Measure for assessing clients

9.3.1.1 Outcome questionnaire 45 (OQ-45)

The Outcome Questionnaire 45 (OQ-45; Lambert, 2004) is a 45-item self-report measure designed for measuring changes as a result of psychotherapy. The instrument consists of 3 subscales: Items are scored on a 5-point Likert scale, ranging from 0 = never to 4 = almost always. The instrument yields three subscales—Subjective Distress (SD), Interpersonal Relations (IR), and Social Role (SR). Test–retest reliability is reported to be r=0.84, and internal consistency is reportedly 0.93 (Doerfler, Addis, & Moran, 2002). The OQ-45 is reported to correlate with a number of other self-report measures, such as the Beck Depression Inventory, and to be responsive to changes over time as a result of psychotherapy (Vermeersch, Lambert, & Burlingame, 2000). The OQ-45 was chosen for the following reasons: a) it has been used in a large proportion of previous therapist effectiveness research;

and b) it was already in use as a standard practice at the two main sites used for data collection in this study.

9.4 Data collection procedures

Ethics approval for the study was obtained from the QUT ethics committee (See appendix G), although practical necessities dictated that some elements for which approval was obtained were not in the event included in the study. After signing consent forms, participating therapists were interviewed according to the protocol of the Adult Attachment Interview. Following the interview, the therapists were asked to complete a series of questionnaires, which included the IRI, and the ECR. Following this, they were shown the Movie for Assessing Social Cognition (MASC: Dziobek, et al., 2006), and asked to answer the questions involved in that protocol. Those therapists for whom client OQ-45 data was not already available were then given client information sheets, client consent forms and instructions for collecting the OQ-45 data from their clients.

9.5 Data analysis

Data for the first study were analysed using hierarchical linear modelling (HLM). HLM was chosen for multiple reasons. Firstly, HLM deals satisfactorily with the dependency between clusters in longitudinal and cross-sectional data that involves hierarchical properties. Secondly, hierarchical linear models have the capacity to clarify trends even when observations are missing for some persons across the waves of data collection. Thirdly, hierarchical linear models can also accommodate situations in which the time of data collection varies across persons. Fourthly, hierarchical linear models can handle missing data across levels of dependent variables and allow for within-subjects and/or between-subjects heterogeneity. Fifthly, hierarchical linear models explicitly model the covariance structure of the data and allow time to be treated as a fixed or random effect. Finally, hierarchical linear

models do not require the assumption of sphericity (Bryk & Raudenbush, 1988; Bryk & Raudenbush, 1992; Todd, Crook, & Barilla, 2005).

The analysis was completed using the software program HLM, version 7.22a. A four level model was implemented, in which sessions are nested within clients who are nested within therapists who are nested within clinics. The model allowed both intercepts and slopes to vary randomly. The OQ-45 scores of clients were the dependent variable, with therapist effectiveness defined as the slope of the equation that best predicts the trajectory of client OQ-45 scores for a therapist over time.

Therapist reflective functioning, therapist experiencing and therapist MASC scores were treated as therapist level random explanatory variables. Client presenting problems were treated as client level explanatory random variables. Therapist gender and therapist theoretical orientation were treated as therapist level fixed explanatory variables. Client age and client gender were treated as client level fixed explanatory variables. Variables which failed to demonstrate explanatory power were removed from the equations.

CHAPTER 10

RESULTS

The main data analysis methodology used was Hierarchical Linear Modelling (Bryk & Raudenbush, 1992). The data were examined using a 4-level model, in which therapy sessions were nested within clients who were nested within therapists who were nested within clinics. Prior to applying the main model to the data, a number of preliminary analyses were conducted, as detailed below.

10.1 Descriptive Statistics

Means, standard deviations, minimum and maximum values for the variables analysed in this study are reported in Table 2, below.

Table 2. Descriptive statistics

Variable	Name	N	Mean	SD	Minimum	Maximum
Level one						
	Session	4760	5.25	5.62	2	43
	OQ	4760	77.60	23.83	8	164
Level two						
	Initial severity	1001	80.39	23.30	10	153
	No of sessions	1001	4.76	4.71	2.00	43.00
Level three						
	Therapist age	25	37.88	10.77	24	56
	ECR Anxiety	25	3.47	0.69	2.11	5.00
	ECR Avoidance	25	3.75	0.82	1.78	5.22
	Reflective Functioning (RF)	25	6.12	1.09	4	7.5
	MASC	25	37.76	2.88	31.00	42.00
	IRI	22	74.64	8.57	59	89
	Number of Clients	25	38.84	57.84	4	219
Level four						
	Clinic Mean Initial Severity	3	81.24	5.47	75.74	86.67

Correlations between the therapist level variables are given in Table 3, below.

Table 3. Correlations between therapist variables

	Age	Orientation	No of Clients	ECR Avoidance	ECR Anxiety	RF
Age	1.000					
No of Clients	0.261	-0.001	1.000			
ECR Avoidance	-0.169	-0.238	0.261	1.000		
ECR Anxiety	-0.010	-0.204	-0.262	0.220	1.000	
RF	-0.314	0.001	-0.185	0.057	0.091	1.000
MASC	-0.242	-0.361	-0.361	-0.086	0.019	0.407*

*$p < 0.05$

The change in OQ45.2 scores over the course of therapy can be considered in terms of whether there is reliable improvement, no reliable change, or reliable deterioration. The results the therapists achieved with their clients in this regard are presented in Table 4 below.

Table 4. Distribution of therapist outcomes

	Minimum	Maximum	Mean	S.D.
Percentage reliably improved	15.63	80.00	40.30	18.23
Percentage with no reliable change	20.00	76.19	48.66	16.55
Percentage reliably deteriorated	0.00	60.00	11.04	13.97
Percentage recovered*	0.00	100.00	41.45	24.69

*In clinically normal range at end of therapy

10.2 Normality

The dependent variable in this study is the OQ-45 score. OQ-45 scores for the study have a kurtosis of 0.02, a standard error of kurtosis of 0.07, skewness of 0.04 and standard error of skewness of 0.02. These values suggest that the assumption of normality for this sample is reasonable. Kurtosis and Skewness values for the therapist variables examined in this study are presented in Table 5 below. These also suggest that the assumption of normality is reasonable.

Table 5. Skewness and kurtosis of therapist variables

	RF	MASC	ECR Avoidance	ECR Anxiety
Skewness	-0.542	-0.344	-0.768	0.440
Standard Error of Skewness	0.464	0.464	0.464	0.464
Kurtosis	-0.643	-0.192	0.398	0.019
Standard Error of Kurtosis	0.902	0.902	0.902	0.902

10.3 Inter-rater reliability

Since the main predictor variables for this study are based on coding of the Adult Attachment Interview by trained and accredited raters, it was important to assess inter-rater reliability. For reflective function, this was done in several ways: using the intraclass correlation coefficient; using Krippendorf's alpha and using Lin's concordance. For reflective functioning, the intraclass correlation was 0.73, Krippendorf's alpha was 0.79 and Lin's concordance was 0.71. This was considered satisfactory.

For the AAI, 7 transcripts were scored by both raters in order to allow for calculation of inter-rater reliability. For these 7 transcripts, the level of agreement was 0.43, giving a Kappa of 0.29. Several of the therapists in this group were classified as unresolved for grief and loss by one rater but not the other. Taking the alternate classification for those therapists, the agreement rose to 0.57 and the Kappa to 0.46. This is still not satisfactory. Since inter-rater reliability for the attachment scoring of the AAI was unsatisfactory, only self-report attachment results were used in the main analysis. The only use made of the AAI attachment results was to use them to illustrate a possible explanation of results in the discussion section.

10.4 Unconditional model

The first step in a Hierarchical Linear Modelling investigation involves the fitting of a completely unconditional random regression coefficient model. In this model, the coefficients are allowed to vary randomly across therapists, but no therapist or client level predictors are included in the model. The unconditional model was specified as follows:

The model for level one is specified in the equation $OQ_{mtij} = \psi_{0tij} + \psi_{1tij}*(SESSION_{mtij}) + \varepsilon_{mtij}$. In this equation, is the Outcome Questionnaire score from session *m* of client *t* who is seeing therapist *i* at clinic *j*. ψ_{0tij} is the initial OQ score for client *t* of therapist *i* at clinic *j*. ψ_{1tij}

is the slope, or improvement trajectory of the outcome scores over time for client *t* of therapist *i* at clinic *j*. i ε_{mtij} is the error variance associated with level one.

The model for level two is specified in the following two equations: $\psi_{0tij} = \pi_{00ij} + e_{0tij}$ and $\psi_{1tij} = \pi_{10ij}$. The first of these equations divides the initial OQ score, or intercept, into a random component attributed to the client level (e_{0tij}) and a level 2 contribution (π_{00ij}) which will be further decomposed at the next level. The second equation simply translates the slope component into a variable using the notation of this level.

The model for level three is specified in the following two equations: $\pi_{00ij} = \beta_{000j} + r_{00ij}$ and $\pi_{10ij} = \beta_{100j} + r_{10ij}$. The first of these equations partitions the intercept component from the previous level into a level three random component (r_{00ij}) and a level three fixed component (β_{000j}). The second equation partitions the slope component from the previous level into a level three component (β_{100j}) and a level three error term (r_{10ij}), thus allowing for random variations of slope as well as intercept.

The model for level four is specified by the following two equations: $\beta_{000j} = \gamma_{0000} + u_{000j}$ and $\beta_{100j} = \gamma_{1000} + u_{100j}$. The first of these equations partitions the intercept component from the previous level into a level four contribution (γ_{0000}) and a level four error term (u_{000j}). The second equation partitions the slope component into a level four component (γ_{1000}) and a level four error term (u_{100j}). Again, this allows for random variations of slope as well as intercept.

Combining the equations for the four levels into a single equation, we get the following: $OQ_{mtij} = \gamma_{0000} + \gamma_{1000}*SESSION_{mtij} + e_{0tij} + r_{00ij} + r_{10ij}*SESSION_{mtij} + u_{000j} + u_{100j}*SESSION_{mtij} + \varepsilon_{mtij}$. In this equation, γ_{0000} is the level four contribution to the intercept, γ_{1000} is the level four contribution to the slope, e_{0tij} is the level two intercept variance, r_{00ij} is the level three intercept variance, r_{10ij} is the level three slope variance, u_{000j} is the level four intercept variance, u_{100j} is the level four slope variance, and ε_{mtij} is the level one error variance.

The results for the unconditional model are presented in Table 6**Error! Reference source not found.**, below. Clinic is significant in relation to the intercept, but not in relation to the

slope of the OQ scores. This means that, although it appears that there are differences between the clinics in terms of overall severity of client difficulties, these differences are not predictive of the rate of improvement of the clients at the clinics. The unconditional model also indicates that, as expected, therapists make a significant contribution to the slopes of the OQ scores.

Table 6. HLM results for the unconditional model

	Coefficient	SE	*t*-ratio	*df*	*p*
Contribution of Clinic to the intercept (γ_{0000})	77.176625	4.240165	18.201	2	0.003
Contribution of Clinic to the OQ slope (γ_{1000})	-0.599067	0.307727	-1.947	2	0.191
	S.D.	Variance	χ^2	*df*	*p*
Contribution of Therapist to OQ slope (r_{10ij})	0.61603	0.37949	96.16577	21	<0.001

10.5 Preliminary analyses

Before exploring the factors involved in the hypotheses central to this thesis, a conditional model involving factors which, on the basis of previous research, were expected not to contribute significantly to therapist effectiveness, was analysed. The predictors in this model were therapist gender, age, orientation (type of therapy practiced) and number of clients. The equation for this model was $OQ_{mtij} = \gamma_{0000} + \gamma_{0010}$*THER_GEN$_{ij}$ + γ_{0020}*THER_AGE$_{ij}$ + γ_{0030}*ORIENTAT$_{ij}$ + γ_{0040}*NO_CLIEN$_{ij}$ + γ_{1000}*$SESSION_{mtij}$ + γ_{1010}*$SESSION_{mtij}$*THER_GEN$_{ij}$ + γ_{1020}*$SESSION_{mtij}$*THER_AGE$_{ij}$ + γ_{1030}*$SESSION_{mtij}$*ORIENTAT$_{ij}$ + γ_{1040}*$SESSION_{mtij}$*NO_CLIEN$_{ij}$ + e_{0tij} + r_{00ij} + r_{10ij} *$SESSION_{mtij}$ + u_{000j} + u_{100j} *$SESSION_{mtij}$ + ε_{mtij}. . The results of this analysis are presented in Table 7, below. As expected, none of these factors contributed significantly to the explanation of therapist effectiveness. A comparison of this model with the unconditional model was non-significant (χ^2= 6.99310, *df*=8, *p*>.500). This indicates that adding therapist

gender, age, orientation and number of clients did not improve the adequacy of the model. Therefore, these variables were discarded for subsequent analyses.

Table 7. Effect of therapist gender, age, orientation and number of clients

	Coefficient	SE	*t*-ratio	*d.f.*	*p*-value
Effects on intercept					
Therapist Gender	-3.041266	2.199767	-1.383	18	0.184
Therapist Age	-0.144053	0.093193	-1.546	18	0.140
Therapist Orientation	-0.809074	0.600023	-1.348	18	0.194
Number of Clients	-0.034657	0.019923	-1.740	18	0.099
Effects on slope					
Therapist Gender	0.173590	0.435052	0.399	18	0.695
Therapist Age	0.005288	0.014812	0.357	18	0.725
Therapist Orientation	-0.077271	0.061859	-1.249	18	0.228
Number of Clients	-0.000663	0.002954	-0.224	18	0.825

Therapists saw clients for widely differing numbers of sessions. Hence it was considered important to test the effect of number of sessions on outcome. Thus, a separate analysis was run in which number of sessions was added to the unconditional model. The equation for this model was $OQ_{mtij} = \gamma_{0000} + \gamma_{0100}$*NO_OF_SE$_{tij} + \gamma_{1000}$*$SESSION_{mtij} + e_{0tij} + r_{00ij} + r_{10ij}$ *$SESSION_{mtij} + u_{000j} + u_{100j}$ *$SESSION_{mtij} + \varepsilon_{mtij}$. As can be seen from Table 8, the effect of number of sessions on outcome was non-significant. Hence, number of sessions was excluded from further analyses.

Table 8. Effect of number of sessions on outcome

Fixed Effect	Coefficient	SE	*t*-ratio	*d.f.*	*p*-value
Number of Sessions	-0.565579	0.331820	-1.704	2	0.230

Initial severity of client disturbance was considered likely to have an effect on outcome, so it was considered important to test for such an effect. Thus an analysis was conducted in

which initial severity was added to the unconditional model as a level two predictor. The equation for this analysis was $OQ_{mtij} = \gamma_{0000} + \gamma_{0100}$*INITSEV$_{tij} + \gamma_{1000}$*$SESSION_{mtij} + \gamma_{1100}$*$SESSION_{mtij}$*INITSEV$_{tij} + e_{0tij} + r_{00ij} + r_{10ij}$ *$SESSION_{mtij} + u_{000j} + u_{100j}$ *$SESSION_{mtij} + \varepsilon_{mtij}$. Results of this analysis are shown in Table 9, below. As can be seen from the table, Initial severity had a significant effect both on the level of the intercept for outcome (p<.001) and also on the slope (p<.001). It will be noted that the effect on slope was that more severe clients had greater improvement, presumably because they had more room to improve. A comparison of this model with the unconditional model yielded the follow model comparison statistics: χ^2= 1351.14953, df =2, p<0.001. This indicates that the addition of initial severity as a predictor significantly improved the model. Hence, it was considered important to retain initial severity as a level two predictor in subsequent analyses, in order to control for its effects.

Table 9. Effect of initial severity and number of sessions on outcome

	Coefficient	SE	*t*-ratio	*d.f.*	*p*-value
Effect on intercept:					
Initial Severity	0.794197	0.015968	49.736	916	<0.001
Effect on slope:					
Initial Severity	-0.018896	0.002912	-6.488	37010	<0.001

Therapists and clients were drawn from more than one clinic. The possibility of systematic differences between clinics therefore needed exploration. Given that, in the unconditional model, clinic was found to have a significant effect on intercept but not slope, it seemed likely that there were differences in client severity between clinics. Examination of the data suggested that there were differences in average level of initial severity between clinics. Clinic mean initial severity was therefore added as a predictor variable at level four in the model, in addition to the client initial severity score already added at level two. The equation for this model was $OQ_{mtij} = \gamma_{0000} + \gamma_{0001} + \gamma_{0100}$*INITSEV$_{tij} + \gamma_{1000}$*$SESSION_{mtij}$ +

γ_{1001}*$SESSION_{mtij}$ + γ_{1100}*$SESSION_{mtij}$*INITSEV$_{tij}$ + e_{0tij} + r_{00ij} + r_{10ij} *$SESSION_{mtij}$ + u_{000j} + u_{100j} *$SESSION_{mtij}$ + ε_{mtij}. Clinic Mean initial severity was found to have a significant effect on the intercept (*p=.017*), but not on slope (*p*=.114), as can be seen from Table 10, below. A model comparison indicated that including clinic mean initial severity improved the model (χ^2 = 9.07212, *df*=2, *p*=.011). Therefore it was decided to retain clinic mean initial severity in the model, for intercept only, to control for this effect.

Table 10. Effect of clinic mean initial severity and client initial severity on intercept and slope

	Coefficient	SE	*t*-ratio	*df*	*p*-value
Effects on Intercept:					
Clinic mean initial severity (Level 4)	0.867098	0.219094	3.958	4	0.017
Client initial severity (Level 2)	0.793053	0.015980	49.627	913	<0.001
Effects on Slope:					
Clinic mean initial severity (Level 4)	0.120184	0.059644	2.015	4	0.114
Client initial severity (Level 2)	-0.018796	0.002918	-6.442	3707	<0.001

10.6 Hypothesis One – Reflective functioning – H1a

The major hypothesis of this study is that reflective functioning, as measured by the reflective functioning scale, predicts therapist effectiveness. To assess this, reflective functioning scores were added at level 3 into the model presented in the previous section. The equation for this model was

$OQ_{mtij} = \gamma_{0000} + \gamma_{0001} + \gamma_{0100}$*INITSEV$_{tij}$ + γ_{1000}*$SESSION_{mtij}$ + γ_{1010}*$SESSION_{mtij}$*RF$_{ij}$ + e_{0tij} + r_{00ij} + r_{10ij} *$SESSION_{mtij}$ + u_{000j} + u_{100j} *$SESSION_{mtij}$ + ε_{mtij}. The results are presented in Table 11, below. There is a significant fixed effect for reflective functioning (p<0.001). The addition of reflective functioning to the model provides a markedly significant improvement over the previous model (χ^2= 12.46303, df=1, p<0.001).

Table 11. Effect of reflective functioning on therapist effectiveness (slope)

	Coefficient	SE	*t*-ratio	*df*	*p*-value
Reflective Functioning	-0.534693	0.126064	-4.241	18	<0.001

The null hypothesis is clearly rejected. This clearly significant result can be further illustrated graphically. The trajectories for clients of therapists with low, medium and high RF are presented in Figure 1 below. The high RF group consists of those therapists with an RF score of 7 or higher. The medium RF group contains therapists scoring higher than 5 and lower than 7. The low RF group consists of therapists scoring 5 or lower on the RF scale. It is evident from the slopes that the level of symptoms of the clients of high RF therapists decreased substantially over time. In other words, these therapists were quite effective. The level of symptoms for clients of therapists with medium levels of RF also decreased over time, but to a lesser extent than for the clients of high RF therapists. Low RF therapists have negligible effect on client symptoms.

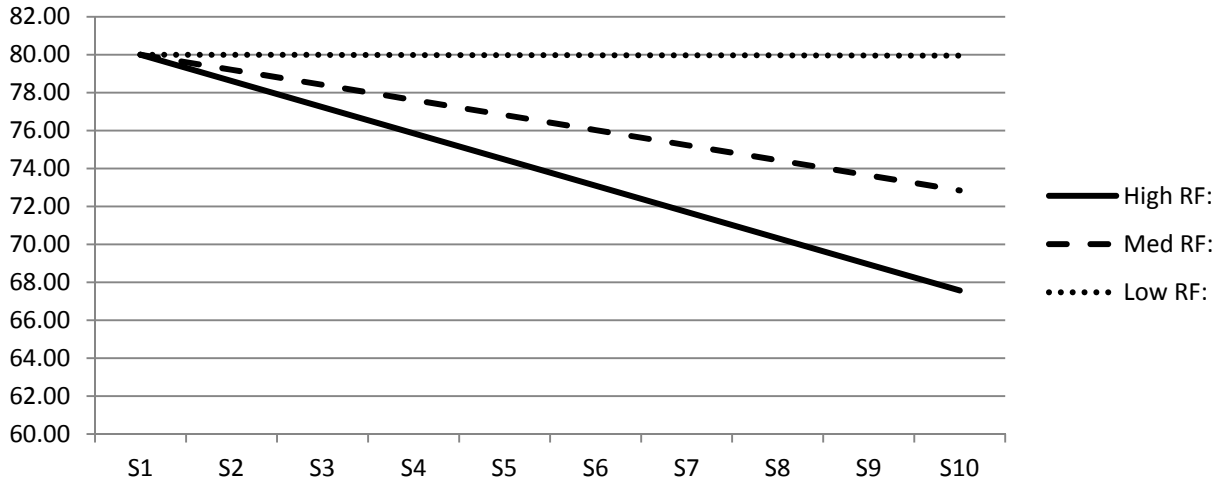

Figure 1. OQ score trajectories for clients of low, medium and high RF therapists

Another graphical presentation of the reflective functioning data is given in Figure 2 below. In this graph, therapists are sorted by effectiveness with the least effective therapist on the left and the most effective therapist on the right. The graph plots their level of reflective functioning.

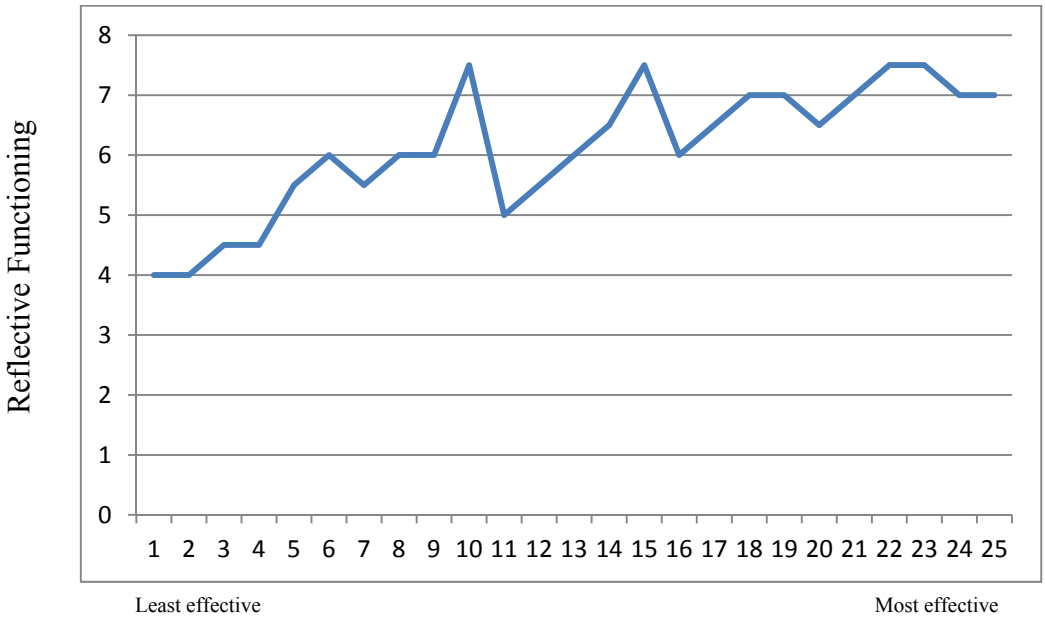

Figure 2. Therapist RF for least to most effective therapist

Given the variability in numbers of clients per therapist, the numbers of clients for the most and least effective therapist were examined, since although number of clients had been found not to predict outcome, it was nevertheless thought to be possible that inaccuracy of slope measurement for the most and least effective clients might have had some effect on the result. The most effective therapist had only 5 clients and the least effective therapist had only 6 clients. However, the second most effective therapist had 30 clients and the second least effective therapist had 32 clients. Therefore, the analysis was rerun with the most effective and least effective therapists excluded. RF still significantly predicted effectiveness ($p = 0.005$). It was therefore concluded that this finding had not been skewed by any effect from the low client numbers of the most and least effective therapist.

10.7 Estimation of effect size

Estimates of variance accounted for are problematic in multilevel models (McCoach, 2010; Widman, 2011). It is not possible to calculate a direct equivalent to R^2 for multilevel models. Several methods of estimating an approximation of the variance accounted for have been proposed. The two most widely used are proportional reduction in variance (Bryk & Raudenbush, 1992) and proportion reduction in prediction error (Snijders & Bosker, 1994). Both of these are problematic (McCoach, 2010). They are, however, widely used, the most commonly reported being proportional reduction in variance (McCoach, 2010).

For the data reported here, the estimate for the proportion of therapist effect variance explained by RF using the proportional reduction in variance is 0.7046. This is calculated by subtracting the random variance at level 3 with RF in the equation from the random variance at level 3 without RF in the equation is 1.31212. The unexplained variance at level 3 with RF in the equation is 0.38764. So the equation for proportional reduction in variance becomes (1.31212 - 0.38764)/ 1.31212 = 0.704569704. Thus, the proportional reduction in variance method suggests that 70.5% of the variance in therapist effectiveness is accounted for by RF.

Given the problematic nature of estimating variance proportions for multilevel models, a purely descriptive estimate of effect size suggested by Bruce Wampold (2012, 2013) was calculated. This involved ranking the therapists based on their reflective functioning, dividing the therapists into high RF and low RF based on a median split, and calculating a Cohen's *d* for the difference in effectiveness between the high RF and low RF groups. This procedure yields a Cohen's *d* of -1.51, which is substantial (the negative sign indicates that higher RF is associated with a negative slope: i.e. improvement). While this effect size may be inflated by the median split procedure, it nevertheless is indicative that something substantial is happening here.

Since both these methods suggest a substantial effect size, it would be expected that the correlation between RF and the slope of client OQ regression lines as aggregated through

HLM would be substantial. This was therefore checked. The correlation between RF and slope was in fact -0.839, a very substantial correlation, adding further support to the substantial nature of the effect size.

10.8 Supplementary mentalization hypotheses

10.8.1 Hypothesis H1b – the MASC and therapist effectiveness

The MASC score for correct answers was added to the analysis discussed above. The equation for this analysis was $OQ_{mtij} = \gamma_{0000} + \gamma_{0001} + \gamma_{0100}$*INITSEV$_{tij} + \gamma_{1000}$*$SESSION_{mtij} + \gamma_{1010}$*$SESSION_{mtij}$*RF$_{ij} + \gamma_{1020}$*$SESSION_{mtij}$*MASC$_{ij} + \gamma_{1100}$*$SESSION_{mtij}$*INITSEV$_{tij} + e_{0tij} + r_{00ij} + r_{10ij}$ *$SESSION_{mtij} + u_{000j} + u_{100j}$ *$SESSION_{mtij} + \varepsilon_{mtij}$. The MASC score had no significant effect on outcome over and above that accounted for by RF. The results of this analysis are presented in Table 12, below.

Table 12. Effects of MASC and RF on therapist effectiveness

	Coefficient	SE	*t*-ratio	*df*	*p*-value
MASC	0.049117	0.048494	1.013	17	0.325
Reflective Functioning	-0.582725	0.133366	-4.369	17	<0.001

This result could merely mean that the reflective functioning scale is the more relevant measure and that the MASC adds nothing additional. On the other hand, it could indicate that the MASC does not predict therapist effectiveness. To clarify this, the MASC was entered into the analysis without RF. The MASC was not significant alone either (p= 0.292). The results of this analysis are presented in Table 13, below.

Table 13. Effect of the MASC on therapist effectiveness

	Coefficient	SE	*t*-ratio	*df*	*p*-value
MASC (without RF)	-0.072190	0.056578	-1.276	18	0.218

Thus, the null hypothesis for hypothesis H1b is not rejected. The data described here do not support the idea that the MASC is predictive of therapist effectiveness. Since there has been some suggestion that the MASC might be useful as a measure of mentalization, as discussed in Chapter 6, it is noted that the correlation between the MASC score and RF in this sample was moderate (r= 0.41).

10.8.2 Hypothesis H1c – the IRI and therapist effectiveness

A separate analysis was conducted regarding the relationship between the IRI and therapist effectiveness, since the IRI was only collected for 22 of the 25 therapists, for reasons given in Chapter 8. The IRI was modelled using the equation $OQ_{tij} = \gamma_{000} + \gamma_{001}$*CLINIC$_j$ + γ_{010}*INITSEV$_{ij}$ + γ_{100}*$SESSION_{tij}$ + γ_{101}*$SESSION_{tij}$*IRI_TOT$_j$ + r_{0ij} + u_{00j} + u_{10j} *$SESSION_{tij}$ + e_{tij}. The IRI total score was non-significant as a predictor of effectiveness (p= 0.437). The results of this analysis are presented in Table 14, below.

Table 14. Effect of IRI total score on therapist effectiveness

	Coefficient	SE	*t*-ratio	*d.f.*	*p*-value
IRI Total Score	-0.014958	0.018845	-0.794	20	0.437

Since the IRI total score is constructed from four subscales, clarification of the non-significant result presented above was sought through an analysis of the effects of the subscales. The four subscales – perspective taking, fantasy, emotional concern and personal distress were analysed using the equation $OQ_{tij} = \gamma_{000} + \gamma_{001}$*CLINIC$_j$ + γ_{010}*INITSEV$_{ij}$ + γ_{100}*$SESSION_{tij}$ + γ_{101}*$SESSION_{tij}$*IRI_PT$_j$ + γ_{102}*$SESSION_{tij}$*IRI_FS$_j$ + γ_{103}*$SESSION_{tij}$*IRI_EC$_j$ + γ_{104}*$SESSION_{tij}$*IRI_PD$_j$ + r_{0ij} + u_{00j} + u_{10j} *$SESSION_{tij}$ + e_{tij}. None of the four subscales was significant. The closest was personal distress (p= 0.084). The results of this analysis are presented in Table 15, below.

Table 15. Effect of IRI subscales on therapist effectiveness

	Coefficient	SE	*t*-ratio	*d.f.*	*p*-value
Perspective taking	-0.023373	0.045776	-0.511	17	0.616
Fantasy	0.038443	0.023436	1.640	17	0.119
Emotional Control	-0.048904	0.035039	-1.396	17	0.181
Personal Distress	-0.054646	0.029732	-1.838	17	0.084

Thus, for hypothesis H1c, the null hypothesis was not rejected. This data does not support the idea that self-reported empathy, as measured by the IRI, predicts therapist effectiveness.

10.9 Hypothesis 2 – Attachment

Attachment was assessed by two methods: self-report and interview. As mentioned at the beginning of the chapter, the AAI attachment scores were unsatisfactory because of poor inter-rater reliability. Therefore, the analysis of attachment was based on the ECR scores

The ECR yields two attachment scales: anxiety and avoidance. An algorithm is also provided for calculating attachment classifications from these scales (Brennan, et al., 1998). On the basis of this algorithm, 12 of the therapists were classified as fearful, 7 therapists were classified as dismissing, 5 therapists were classified as secure and 1 therapist was classified as preoccupied. These results are shown graphically in Figure 2 below. The anxiety and avoidance scales were slightly, but non-significantly correlated with each other (r = 0.22). Internal consistency for the avoidance scale in this sample was $r = 0.69$. Internal consistency for the anxiety scale was only $r = 0.55$. (These are noticeably lower than those reported by Brennan, et al (1998), which were $r = 0.94$ for avoidance and $r = 0.91$ for anxiety).

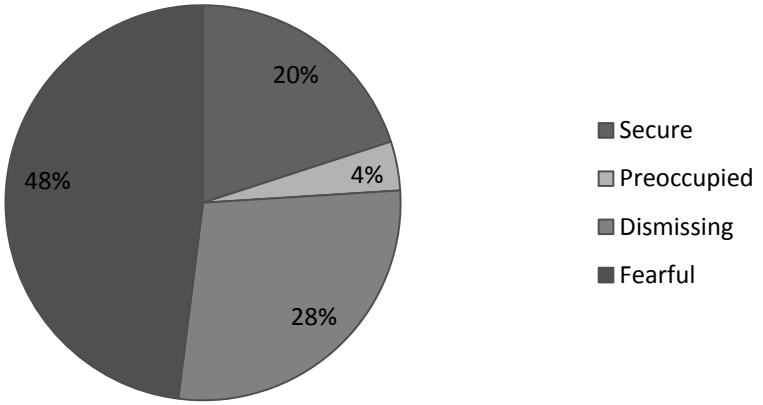

Figure 3. Therapist Attachment Styles

To test hypotheses H2a and H2b, the ECR and avoidance scales were initially added without RF in the model, using the equation $OQ_{mtij} = \gamma_{0000} + \gamma_{0001} + \gamma_{0100}$*INITSEV$_{tij}$ + γ_{1000}*$SESSION_{mtij}$ + γ_{1010}*$SESSION_{mtij}$*ECR_AVD$_{ij}$ + γ_{1020}*$SESSION_{mtij}$*ECR_ANX$_{ij}$ + γ_{1100}*$SESSION_{mtij}$*INITSEV$_{tij}$ + e_{0tij} + r_{00ij} + r_{10ij} *$SESSION_{mtij}$ + u_{000j} + u_{100j} *$SESSION_{mtij}$ + ε_{mtij}. Fixed effects for self-reported attachment anxiety and avoidance were non-significant (see Table 16, below). Model comparison statistics were also non-significant (χ^2= 2.78716, df = 2, p = 0.247).

Table 16. Effect of ECR anxiety and avoidance on therapist effectiveness

	Coefficient	SE	*t*-ratio	*df*	*p*-value
ECR Avoidance	0.005933	0.223414	0.027	17	0.979
ECR Anxiety	-0.386301	0.228288	-1.692	17	0.109

Adding the ECR scales together with RF did not noticeably change this result, as can be seen from Table 17, below. ECR avoidance is a long way from any significance and while ECR anxiety is somewhat closer to significance, its effect is in the opposite direction to that hypothesised.

Table 17. The effect of RF, ECR avoidance and ECR anxiety on therapist effectiveness

	Coefficient	SE	*t*-ratio	*df*	*t*-ratio
ECR Avoidance	0.121855	0.172352	0.707	16	0.490
ECR Anxiety	-0.337508	0.169570	-1.990	16	0.064
Reflective Functioning	-0.510238	0.113833	-4.482	16	<0.001

In order to further explore the findings presented above, interactions were investigated. A significant interaction between RF and ECR anxiety was found (p= 0.005). Furthermore, when this interaction term was added to the model, ECR anxiety was now significant in the originally hypothesised direction. The equation for the analysis of interaction was $OQ_{mtij} = \gamma_{0000} + \gamma_{0001} + \gamma_{0100}$*INITSEV$_{tij} + \gamma_{1000}$*$SESSION_{mtij}$ + γ_{1010}*$SESSION_{mtij}$*RF$_{ij}$ + γ_{1020}*$SESSION_{mtij}$*RFXANX$_{ij}$ + γ_{1030}*$SESSION_{mtij}$*ECR_AVD$_{ij}$ + γ_{1040}*$SESSION_{mtij}$*ECR_ANX$_{ij}$ + γ_{1100}*$SESSION_{mtij}$*INITSEV$_{tij}$ + e_{0tij} + r_{00ij} + r_{10ij} *$SESSION_{mtij}$ + u_{000j} + u_{100j} *$SESSION_{mtij}$ + ε_{mtij}. Results of the analysis are presented in Table 18, below.

Table 18. Interaction between RF and attachment anxiety

	Coefficient	SE	*t*-ratio	*df*	*p*-value
Reflective Functioning	1.615328	0.520387	3.104	15	0.007
ECR Avoidance	0.000862	0.135746	0.006	15	0.995
ECR Anxiety	4.011969	1.099564	3.649	15	0.002
Interaction between ECR Anxiety and RF	-0.665152	0.166683	-3.991	15	0.001

The nature of the interaction was examined by taking a median split of therapists on their ECR anxiety scores and plotting the relationship between RF and effectiveness for the two groups. The resultant graph is presented below in Figure 5. The effectiveness scores on

the vertical axis represent aggregated slopes from client OQ trajectories, so the more negative the value, the greater the effectiveness. Positive values indicate deterioration rather than improvement. As can be seen from the graph, although higher RF leads to greater effectiveness for both high and low anxiety therapists, the effect of RF on effectiveness is considerably greater for the therapists with high attachment anxiety than it is for those with low anxiety. Furthermore, for the therapists with the lowest RF, higher attachment anxiety reduces their effectiveness, whereas for therapists with higher RF, higher attachment anxiety increases their effectiveness.

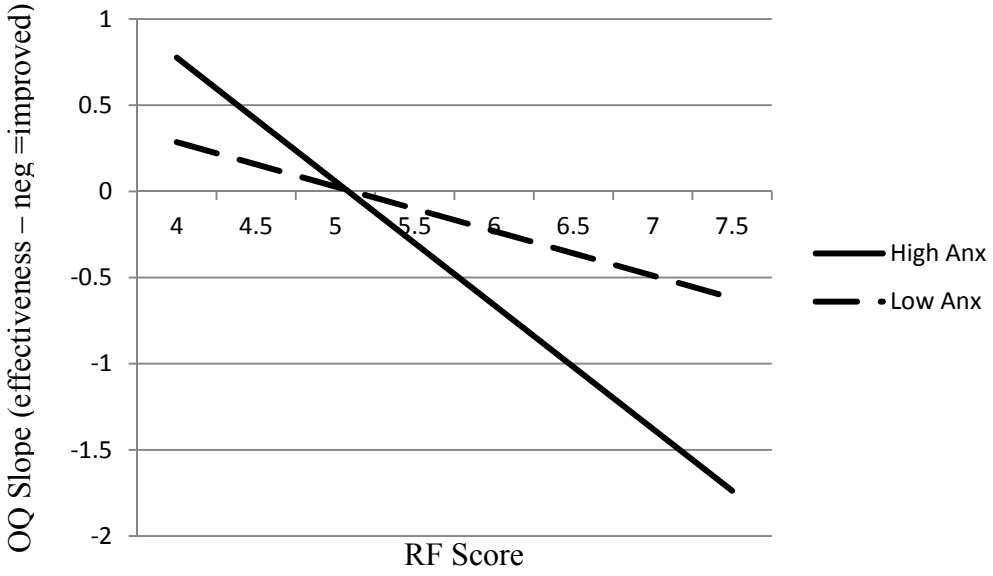

Figure 4. Relationship between RF and effectiveness for high and low attachment anxiety therapists

The interaction demonstrated in Figure 4 above suggests that separate analyses of therapists with high and low RF might yield vastly differing results in terms of the effect of ECR anxiety. Therefore, the level 3 file was sorted by RF, and the top and bottom quartiles of therapists in terms of RF were analysed separately in terms of the effect of attachment anxiety on effectiveness. Since dividing the data into quartiles reduced the numbers too far for a 4 level HLM, the quartiles were analysed as 3-level models. These analyses both yielded significant results for attachment anxiety, and as expected in terms of the interaction,

the results were in opposite directions. The results of the analyses for the two quartiles are presented in Table 19 and Table 20, below.

Table 19. Effect of ECR anxiety on effectiveness for high RF therapist quartile

	Coefficient	SE	*t*-ratio	*df*	*p*-value
ECR Anxiety	-0.851611	0.116036	-7.339	4	0.002

Table 20. Effect of ECR anxiety on effectiveness for low RF therapist quartile

	Coefficient	SE	*t*-ratio	*df*	*p*-value
ECR Anxiety	1.557406	0.170263	9.147	4	<0.001

As can be seen from Table 19, for high RF therapists, self-reported attachment anxiety significantly predicts effectiveness ($p = 0.002$). As can be seen from Table 20, for low RF therapists, lack of self-reported attachment anxiety significantly predicts effectiveness ($p<0.001$).

CHAPTER 11

DISCUSSION

11.1 Summary of findings

These results confirm previous findings indicating that some therapists are more effective than others. Importantly, this investigation has demonstrated that therapist reflective functioning, as measured via therapist reflective functioning on the AAI, is a significant factor contributing to therapist effectiveness. With regard to attachment, this investigation failed to find the hypothesised link between attachment security and therapist effectiveness. However, it did find a significant interaction between reflective functioning and attachment anxiety, meaning that for therapists with low RF, lack of self-reported attachment anxiety predicts effectiveness, whereas for therapists with high RF, self-reported attachment anxiety predicts effectiveness.

11.2 Reflective functioning and therapist effectiveness

The hypothesis that reflective functioning contributes to therapist effectiveness has been supported by the data in this study. Since the therapist mentalizing in such a way as to facilitate growth in the patient's ability to mentalize is considered to be foundational to the process of change in psychotherapy (Fonagy & Bateman, 2006) it makes sense that therapists who have greater capacity for reflective functioning would be more able to perform such facilitation. This is possibly the first empirical study to confirm that therapist reflective functioning does indeed play a role in therapist effectiveness.

These results indicate that therapist mentalizing affects therapist effectiveness independently of attachment. Therapist ability to mentalize might have been expected to directly affect therapist effectiveness given the overlap of the concept of reflective functioning with the concept of empathy, which has been demonstrated previously to have a

role in therapist effectiveness. Nevertheless, reflective functioning had a significant effect in this study where the measure of empathy used, the IRI, did not. Neither the total IRI score, nor the scores on any of the IRI subscales were predictive of therapist effectiveness in this study. The fact that therapist reflective functioning predicted effectiveness where therapist empathy did not, suggests that there is more to mentalizing than empathy. An alternative possibility is that the measure of mentalizing used in this study was more sensitive than the measure of empathy used. Since reflective functioning involves third party rating of interview transcripts, whereas the IRI is a self-report measure, there may also be a point-of-view effect involved in this difference. Furthermore, it is well known that received empathy – the client's perception of the therapist's empathy – is more relevant to the effectiveness of therapy than is the therapist's perception of empathy (Bachelor, 1988; Duan & Hill, 1996; Gurman, 1977). Thus, the therapist IRI may not have the capacity to tap the aspects of empathy relevant to therapist effectiveness. In relation to the lack of significant findings concerning the IRI, it is of note that the MASC also did not significantly predict effectiveness, given that the MASC is arguably as much a measure of empathy as it is of reflective functioning, as discussed in CHAPTER 7, given that the MASC only assesses the interpersonal aspects of reflective functioning and ignores the intrapersonal aspects. The combination of these two results suggest that it may in fact be the intrapersonal aspects of reflective functioning that are relevant to therapist effectiveness.

However, what is of particular interest is that reflective functioning, which is rated by a third party based on an interview with the therapist in which the client does not feature, has relevance to therapist effectiveness. Thus, this study has demonstrated that a specific therapist characteristic contributes to therapist effectiveness. Therapist reflective functioning is a characteristic of the therapist, in contrast to concepts like the alliance, which are characteristics of the relationship. Therefore, as will be discussed in more detail later, this finding has particular relevance to the selection and training of therapists.

The significant association between RF and therapist effectiveness is clearly consistent with the results reported in the PT-AAI study discussed in chapters 4 and 5 (Diamond, et al., 2003). That study, which used a case-study approach because it used only 5 therapists and 10 patients, involved the scoring of therapist reflective functioning on the patient-therapist adult attachment interview (PT-AAI), rather than on the AAI. In that study, in every case in which a therapist scored 4 or above for reflective functioning on the PT-AAI, the client's RF measured on the AAI increased between the two AAIs conducted before and after 12 months of therapy. Therapists in that study did not complete an AAI, so the results reported are not directly comparable with this study. Nevertheless, the finding that therapist RF is related to therapist effectiveness is entirely consistent with the results of that study.

The results reported here also mesh nicely with the results reported in the study into therapist use of personal counselling discussed in Chapter 5 (Rizq & Target, 2010a). That study reported that therapists "with higher levels of RF (who were more likely to be secure/earned secure) appeared to use their experience of being a client in therapy as a springboard to understanding the more subtle and complex psychological needs of their clients" (Rizq & Target, 2010a, p. 476). In fact, of the 4 therapists in that study with the highest RF, 3 of them were classified as "earned secure" on the AAI, a fact which is particularly interesting in the light of the findings in the current study, in which the therapists with the highest RF were rated as secure on the AAI, but as fearful on the ECR – a combination suggestive of an earned secure scenario.

The interaction between attachment anxiety and reflective functioning in this study fits well with the idea of the protective function of mentalizing in which mentalizing is seen as protecting a person from the potentially harmful effects of attachment trauma in earlier life (Eagle, et al., 2009). In this study it appears that reflective functioning may not only protect, but transform attachment anxiety from a negative to a positive factor in terms of its effect on therapist effectiveness.

The finding that reflective functioning predicts therapist effectiveness may also clarify the findings of a study reported in Chapter 4. In that study, psychotherapy students who demonstrated signs of emotional disturbance on self-report measures initially performed less effectively than their peers. However, after training, their effectiveness improved so that it matched their peers (O'Donovan & Dyck, 2005). It seems likely that the students who showed signs of emotional disturbance on self-report measures might have reported high attachment anxiety had they been asked. If they lacked sufficient reflective functioning to deal with their attachment anxiety, then the results of the current research would lead one to expect they would be relatively ineffective as therapists. However, if the process of training they underwent included elements which led to an improvement in their level of RF, then it would be reasonable to expect that their effectiveness would also improve.

This study clarifies a relatively confusing area, by bringing therapist reflective functioning into focus as the particular aspect of the therapist's relational capacity that significantly predicts therapist effectiveness. Reflective functioning is a concept that overlaps several other concepts, as discussed at length in Chapter 6. This study narrows the broad area covered by those concepts, by making it clear that one particular area – that tapped by the reflective functioning scale applied to the AAI – is predictive of therapist effectiveness. The area covered by the Movie for Assessing Social Cognition (MASC), on the other hand, is not relevant to therapist effectiveness, despite the correlation of 0.41 between the two measures. In this regard, it is important to note that the failure of the MASC to predict therapist effectiveness does not appear to be due to a ceiling effect, as might be imagined on account of the fact that it was originally developed to distinguish those on the autism spectrum from those who are not. The maximum possible score on the MASC is 45. The maximum score achieved by any of the therapists was 42, with a mean of 37.76 and a standard deviation of 2.88. This is not what one would expect if there were a ceiling effect.

As already discussed, the area covered by the Interpersonal Reactivity Index (IRI) is also not predictive of therapist effectiveness in terms of its total score, nor in terms of any of its subscales. This raises the question of what it is about the reflective functioning scale that distinguishes it from these other measures in terms of capturing an important ingredient contributing to therapist effectiveness. Clearly, two things distinguish the reflective functioning scale from the IRI: firstly, that it is rated from an interview, whereas the IRI is self-report, as already discussed; and secondly, that it taps a greater degree of therapist internal functioning and self-reflective ability than does the IRI, which is more interpersonally focussed. The MASC, on the other hand, is neither self-report nor interview based. In effect, it is a computerized analogue study, in which respondents give their understanding, via a multiple choice format, of what is happening for the characters in a movie. As such, its focus is purely interpersonal and focussed on social cues, ability to understand interpersonal interactions, and to some extent, ability to pick up on non-verbal indicators of emotion. Therefore it shares with the IRI a more interpersonal focus and a failure to pick up on internal processes. Given these differences, the results in this study suggest that internal processes may be important to the genesis of effective therapists.

It is not surprising that mentalizing is relevant to effective therapy. It could be said with some justification that mentalizing is what therapists do! “All therapy requires mentalizing on the part of the patient and the therapist” (Allen & Fonagy, 2006, p. xix). It makes sense, then, that being able to mentalize better means being able to do better therapy.

11.3 Attachment and therapist effectiveness

The hypothesised association between attachment security and therapist effectiveness was not supported. However, this study found that self-reported attachment anxiety interacts with reflective functioning to predict greater therapeutic effectiveness. In addition, the study found that when the interaction between self-reported attachment anxiety and reflective

functioning is taken into account, lack of self-reported attachment anxiety does in fact predict therapist effectiveness.

The relationship between therapist attachment and therapist effectiveness revealed by the results of this study is complex. The implications of a therapist's self-reported attachment anxiety in terms of therapist effectiveness depends on the therapist's level of reflective functioning. For a therapist with low reflective functioning, a greater sense of attachment anxiety will further reduce their level of effectiveness. For a therapist with moderate to high reflective functioning, a greater awareness of attachment anxiety appears to actually increase their effectiveness. When reflective functioning is ignored, these two effects cancel each other out in the analysis, resulting in a non-significant result for self-reported attachment anxiety.

In other words, if all therapists had a low to average degree of reflective functioning, scoring less than 5 on the reflective functioning scale, this study suggests that the therapists reporting themselves as most securely attached would probably be the most effective. However, in reality, therapist reflective functioning varies, and for therapists with high levels of reflective functioning, self-reported attachment anxiety is predictive of therapist effectiveness, so long as the level of reflective functioning is high enough to enable the therapist to deal with their attachment anxiety.

The complex relationship between attachment and therapist effectiveness uncovered in this study is consistent with aspects of previous research. Coon (2007) found that therapists classified as fearfully attached according to the Relationship Questionnaire reported the highest mean scores on the therapist form of the Working Alliance Inventory. Given that the working alliance inventory is known to be associated with positive outcome, it would be expected that self-reported fearful attachment should be associated with therapist effectiveness. In that regard, it is noteworthy that the most effective four therapists in this study were classified by the ECR as fearful. On the other hand, Coon's (2007) findings

directly contradict the findings of Eames and Roth (2000) who found that fearful attachment was associated with poorer alliance ratings. The findings of this study provide a possibility for reconciling the contradiction, in that the direction of correlation between attachment anxiety and effectiveness is dependent on the level of RF involved. It is therefore likely that the direction of relationship between attachment anxiety and alliance is also dependent on the level of RF, although this is yet to be empirically verified. If this is the case, then differences in the levels of RF in the two samples might explain the differences in the results of Coon's (2007) and Eames and Roth (2000) findings.

Another possible partial bridge between Coon's (2007) and Eames and Roth (2000) findings is supplied by a study that found insecurely attached therapists, as measured by self-report, had better alliances earlier in therapy than those reporting themselves as securely attached, but that by the 7th session therapists reporting themselves as securely attached had better alliances (Sauer, et al., 2003). If early alliance is a more reliable predictor of outcome than later alliance, as suggested by some (Crits-Christoph, Gibbons, Hamilton, Ring-Kurtz, & Gallop, 2011) this might be consistent with self-report attachment insecurity being predictive of therapist effectiveness. However, since none of these studies take therapist reflective functioning into account, a certain degree of contradiction in their findings may be inevitable.

In addition to the complex picture given by statistical analysis, the impression given by the ECR results overall is that effective therapists report themselves as far less secure than was hypothesised in this study. Of the 12 therapists above the median in terms of effectiveness, 8 were classified on the ECR as fearful, 2 as secure, 1 as preoccupied, and 1 as dismissing. In contrast, of the 12 therapists below the median for effectiveness, 4 were classified by the ECR as fearful, 5 as dismissing and 3 as secure. Thus, according to the ECR, the proportion of secure therapists below the median is greater than above the median, and the proportion of fearful and preoccupied therapists above the median is greater than below. An explanation is therefore needed as to why effective therapists would report themselves as

less secure than ineffective therapists. One possibility is to do with openness. It is possible that if there were an absolute measure of attachment security, one might find that therapists with higher self-reported attachment insecurity were not actually less secure than those with lower self-reported insecurity, but that they were more willing to admit to whatever insecurity was within their awareness. It might also be that more effective therapists are more conscientious than less effective therapists, and therefore more concerned to admit to whatever insecurities they might sense.

A similar but slightly different explanation has to do with self-awareness. It might be that more effective therapists have greater levels of self-awareness than less effective therapists, and that this greater self-awareness leads them to be more aware of their own insecurities, and hence to report higher levels of attachment anxiety and avoidance than their less self-aware colleagues.

Whereas the explanations above assume a discrepancy between self-reported attachment insecurity and an hypothesised underlying trait of "actual" attachment insecurity, it is also reasonable to explore explanations which assume that the reported and actual levels correspond. If that is the case, then these results show that effective therapists are somewhat insecure, but good mentalizers. This would fit in with a concept that has been around for some time: that of the "wounded healer" (Groesbeck, 1975). This would mean that these individuals had managed to survive less than ideal attachment scenarios by means of developing and using a high level of reflective functioning. As such, they would have a basis in personal experience for empathising with many of their clients' issues and problems, as well as highly developed abilities to keep in mind multiple perspectives and balance them in such a way as to lead to growth.

A comparison between the unusable AAI data collected in this study and the ECR data is suggestive that the latter explanation may be viable. Out of the 25 therapists in this study, there was complete agreement between the ECR and AAI classifications for only 3 of

them. Those 3 were classified as secure by both instruments. The distribution of the 3 "double secures" was as follows: 2 of them were above the median for effectiveness and 1 was below the median for effectiveness. However, despite the high proportion of therapists above the median for effectiveness who were classified as fearful, preoccupied or dismissing (i.e. insecure) by the ECR, 11 of the 12 therapists above the median received a classification of secure on the AAI. The one who did not was classified as "unresolved for grief or loss". It is not surprising that there is relatively little agreement between the ECR and the AAI, since this is well known to be the case, as discussed earlier. However, the direction of the discrepancy is consistent with the idea that, as a group, the more effective therapists were "actually" more secure than the less effective therapists, but that they reported greater levels of insecurity, either because of greater self-knowledge or greater openness and honesty. With the exception of the two therapists above the median who were classified as secure by both the ECR and the AAI, all of the therapists above the median reported themselves as less secure than their AAI classification. In contrast, the picture below the median was more mixed and included two therapists classified as preoccupied who reported themselves as secure; a discrepancy in the opposite direction. As an aid to the understanding of this discussion, the classifications of therapists by the ECR and AAI are presented in 1, below. It must be remembered however, that the AAI classifications are unreliable, due to lack of inter-rater reliability. Table 21 is offered only in terms of the light it potentially throws on the discussion above.

Table 21. Therapist classifications by ECR and AAI in order of therapist effectiveness

Therapist Rank (1= most effective)	ECR classification	AAI classification
1	Fearful	Secure
2	Fearful	Secure
3	Fearful	Secure
4	Fearful	Secure
5	Secure	Secure
6	Fearful	Secure
7	Preoccupied	Secure
8	Secure	Secure
9	Fearful	Secure
10	Fearful	Unresolved
11	Dismissing	Secure
12	Fearful	Secure
Median: 13	**Dismissing**	**Preoccupied**
14	Secure	Preoccupied
15	Dismissing	Secure
16	Dismissing	Secure
17	Fearful	Preoccupied
18	Dismissing	Secure
19	Fearful	Secure
20	Fearful	Unresolved
21	Secure	Secure
22	Dismissing	Secure
23	Secure	Preoccupied
24	Dismissing	Secure
25	Fearful	Unresolved

One reason why, for therapists with high reflective functioning, attachment anxiety may lead to greater effectiveness is that a characteristic of attachment anxiety is a heightened sense of the need for closeness. This desire to have a sense of closeness in relationships may well lead those therapists with high levels of that desire to work harder at creating a positive therapeutic alliance, in order to feel close, than a therapist without that drive, who might only be striving for a good alliance because of the knowledge that a good alliance will help the therapy.

It is unclear whether the markedly reduced internal reliability of the ECR scales in this sample was due to an effect of the modified wording, or to the nature of the sample.

Similar modified wordings have been used in other studies (cf. Fraley, Niedenthal, Marks, Brumbaugh, & Vicary, 2006; Gunn, 2007; Lo, et al., 2009; Mikulincer & Shaver, 2007). Nevertheless, it is possible that the modified wording affected the respondents' interpretation of the questions in a way that differed from the original ECR.

11.4 The wounded healer

If the upper end of therapist effectiveness is partly determined by a mixture of insecurity and mentalizing ability, then the "wounded healer" literature mentioned earlier is worthy of closer scrutiny. Effective therapists may be those who have risen above difficulties with attachment by means of having or developing a strong capacity for reflective functioning. "It is a truism in the profession that the therapist cannot take the patients further than they have come themselves and that the empathic understanding indispensable for therapeutic work depends on reflected experiences of having been where the patient is" (Mander, 2004, p. 162).

The concept, image, metaphor or archetype of the wounded healer has a long history. In the relatively short term it goes back to Carl Jung, in the longer term it goes back to Greek mythology and the centaur Chiron or Kheiron and is represented again in the medieval myth of Parsifal. The concept has also been related to healing practices in many cultures, one example being shamanism, a term originally applied to ancient Turkish religious practices, but later given wider application as a descriptor of indigenous religious and healing practices in many places (Groesbeck, 1975; Kirmayer, 2003; Miller & Baldwin Jr, 1987; Zerubavel & Wright, 2012).

Applied to psychotherapy, the concept of the wounded healer implies that the therapist, like Chiron of Greek myth, is wounded and yet able to heal, and that the therapist's wounds are part of the healing process. It further implies that therapy is a process in which patient and therapist are both healed. In other words, it is a process of mutual growth. From a

Jungian perspective, it is a process in which the patient initially projects his or her own inner healer onto the therapists, who initially projects her or his own inner wound onto the patient. The process of therapy then involves the working through of those projections such that the patient's inner healer is retrieved and activated, resulting in a cure for the patient and a partial cure for the therapist. In this process, the therapist finds that "strong emotions can be the stimulus for self-reflection and uncovering of wounds. If the helper can remain open to and learn from the strong feelings created by the patient's wounds, greater awareness and integration of his own wounds may be realized" (Miller & Baldwin Jr, 1987, p. 144).

It is important to make a reasonably clear distinction between the concept of the wounded healer and concepts such as burnout. The wounded healer concept should also be differentiated from impaired clinicians who may allow their own distress to adversely affect their patients (Jackson, 2001; Zerubavel & Wright, 2012). This distinction is also intimately tied up with the concept of countertransference. Countertransference is a word with multiple meanings which have changed and merged over the course of history. A recent review delineated four differing conceptions of countertransference: the classical perspective, the totalistic perspective, the complementary perspective and the relational perspective (Hayes, Gelso, & Hummel, 2011). The classical perspective is essentially Freud's view of countertransference and sees it as a negative and destructive influence stemming from the analyst's unresolved childhood issues, and as something to be controlled or eliminated. The totalistic perspective, which emerged in the 1950s and made countertransference a more popular concept, includes in the concept everything that the therapist does, thinks or feels, good, bad or indifferent. The complementary perspective sees countertransference as a manifestation of the patient's transference, which evokes a response from the therapist. The relational perspective sees the countertransference as a co-created quality of the relationship, rather than a manifestation emanating from patient or therapist. Research to date demonstrates the following: countertransference can be associated with negative outcomes;

strategies for managing countertransference can be associated with positive outcomes; and strategies for managing countertransference do not necessarily prevent negative outcomes (Hayes, et al., 2011). The relationship between countertransference and the wounded healer concept is largely tied up in the concept of the management of countertransference. Amongst the strategies thought to be useful in managing countertransference are self-insight and empathy, both of which are likely to be related to reflective functioning, which has been shown to be associated with effectiveness in this study. Thus, it may be that more effective therapists are more effective, in part, because their higher levels of reflective functioning enable them to manager countertransference better.

The concept of the wounded healer has also been explored in research into the motivations of therapists in entering their profession. A study comparing the background characteristics of psychotherapists and physicists found numerous statistically significant differences between them. The incidence of parental absence through death, illness, divorce or separation was significantly higher for psychotherapists than for physicists ($p<.002$). The psychotherapists perceptions regarding the healthiness of their family of origin were significantly lower than the physicists ($p<.004$). Psychotherapists as a group evaluated the words family ($p<.001$), mother ($p<.014$) and father ($p<.017$) significantly more negatively than did the physicists. Role reversal with their parents was perceived by psychotherapists to have occurred significantly more in their families of origin than by physicists ($p<.001$). Psychotherapists were significantly more likely than physicists to see themselves as having taken on a caretaker role in their family of origin than were physicists ($p<.001$). Psychotherapists perceived greater ambiguity of communication in their families of origin than did physicists ($p<.001$). Psychotherapists saw their childhoods as having been unhappy to a significantly greater extent than did physicists ($p<.002$). The data was collected by survey, and subject to sample bias, the limitations of self-report, and retrospectiveness. Nevertheless, it gives significant support to the idea that the concept of wounded healer has

relevance to choosing the career of psychotherapist (Fussell & Bonney, 1990). What is not clear is the extent to which the data from the survey reported above represent differences in childhood experience versus the extent to which they represent differences in perception.

In a large study conducted through the Psychotherapy Research's (SPR) Collaborative Research Network (CRN), in which multiple aspects of the life of psychotherapists were investigated, one of the questions in a survey of more than 3000 therapists asked them about the extent to which they felt their development as a therapist had been influenced by being motivated to resolve their own personal problems. Almost half of the respondents endorsed this item as applying "very much" or much (Orlinsky, Rønnestad, & Ambühl, 2005). This fits with the idea that psychotherapy is often chosen, consciously or unconsciously as a way of dealing with difficulties in one's own life, and that the process of psychotherapy involves a circular process in which both therapist and patient are to some extent healed; in other words, the archetype of the wounded healer (Stone, 2008).

The factors involved in bringing psychotherapists to their profession are summed up by one set of investigators as being largely the result of the development of psychological mindedness, a concept with considerable overlap with reflective functioning, an attribute that is "almost certainly amplified by experiences of cultural or familial or individual distress, as well as by personal therapy. High degrees of psychological-mindedness typically lead to a search for greater understanding of self and others and ultimately the need to help others in a way that feels personally satisfying" (Farber, Manevich, Metzger, & Saypol, 2005). This suggestion fits well both with the concept of the wounded healer and the findings of this study.

11.5 Characteristics of the most and least effective therapists

Based on the data in this study, the most effective therapists have high levels of reflective functioning and high self-reported attachment anxiety. Their most likely ECR

classification is fearful although they may be classified as secure on the AAI. Even though they are high in self-reported attachment anxiety, they are even higher in reflective functioning relative to the mean. This can be seen in Figure 5 in the last chapter.

The least effective therapists, on the other hand, have low reflective functioning and most often report low to moderate attachment anxiety, which they lack the reflective functioning to process. Whether they report lower attachment anxiety than the more effective therapists or not, their self-reported attachment anxiety is proportionally much higher than their level of reflective functioning, relative to the means of both measures.

The most important finding in this study, however, is the fact that reflective functioning is predictive of therapist effectiveness. This is the case irrespective of attachment status and is a finding with potential implications for the selection and training of psychotherapists.

11.6 Research limitations

11.6.1 Sole reliance on a symptoms based self-report measure

As discussed in Chapter 2, there is a growing body of opinion to suggest that symptoms based self-report measures may only capture one element of the changes potentially involved in effective psychotherapy. This study used the OQ-45, a well-respected symptoms-based self-report measure. It would have been preferable to have included a measure of structural change, in addition to the OQ-45. It would also have been useful to have assessed outcome at follow up as well as at the time of therapy, to ascertain the extent to which changes achieved in therapy had been maintained. This study is limited by the fact that it did not do so.

11.6.2 Lack of inter-rater reliability for attachment scores on the AAI

The lack of inter-rater reliability for the attachment scoring of the AAI may have prevented this study from discovering relationships between attachment state of mind and therapist effectiveness which may in fact exist. Given that both the raters had undergone the

substantial training for scoring and reliability involved in becoming an accredited AAI rater, the lack of inter-rater reliability in this study arguably calls into question the validity of the AAI as an assessment tool. It may also indicate that reliability training on the AAI needs to be regularly repeated in order to maintain the reliability of raters, as opposed to the current system which rates a coder as reliable and assumes that they continue to be reliable for the rest of their life. On the other hand, it may be that the AAI is a less reliable classification in samples with high reflective functioning.

11.6.3 Lack of random assignment of clients to therapists

This was a naturalistic study in which clients were not randomly assigned to therapists, but assigned by means of the normal client allocation processes operating in the various clinics. Because of this, we cannot be confident that therapist outcomes have not been affected by client allocation factors. To some extent, this is ameliorated by controlling for initial severity in our analysis, but nevertheless it is possible that non-random client allocation factors may have operated to contaminate results in some undetected way.

11.6.4 Rating of some of the AAIs for RF by the principal investigator

Although the majority of the AAIs (17 of the 25) were rated for RF by an independent person in a different continent, the remainder of the AAIs were rated by the principal investigator, who was not blind to the purpose of the study and might potentially have been biased. This possibility is somewhat ameliorated by the fact that there was good inter-rater reliability between the ratings of the independent rater and the principal investigator, but nevertheless cannot be ruled out.

11.6.5 Differences in timing of data collection

In this study, some therapists were interviewed and data collected before seeing any clients, whereas some were interviewed after seeing all of the clients. Most were interviewed

at an intermediate point where they had seen some clients and were still to see some clients. This may have introduced an additional source of variance.

11.6.6 Differences between clinics

It is clear from the data that there were differences between the clinics at which this data was collected. Although this was controlled for in the analysis, it may nevertheless have affected the results in ways difficult to predict.

11.6.7 Differences between therapists in number of clients

The number of clients per therapist in this study ranged from 4 to 209. It could be argued that the small numbers for some therapists increased the risk that the slope is not a valid estimate of therapist effectiveness, because chance could lead to a therapist having clients with good recovery prospects regardless of therapist effectiveness. To the extent that recovery prospects relate to initial severity, controlling for initial severity counters this problem to some extent. However, this study does not investigate the effectiveness of each individual therapist, but factors predicting the trend across therapists in terms of effectiveness. In that process, the pooling of estimates from all the therapists means that the inclusion of therapists with lower numbers of clients helps to increase the power of the estimation of the effect of predictor variables, irrespective of the accuracy of estimation at the individual therapist level (Wampold, 2012). It would, however, be a problem if the number of clients per therapist varied in a systematic, non-random way that affected outcome. This does not appear to be the case, given that number of clients per therapist is non-significant as a predictor variable. Furthermore, the small and non-significant correlation between RF and number of clients (r = -0.185, p = 0.377) indicates that differences in numbers of clients have not contaminated the most significant result in this study, the connection between RF and therapist effectiveness. Nevertheless, the possibility that variations in numbers of clients may have subtly affected the results in some way cannot be completely excluded.

11.6.8 The use of students

More than half of the therapists were postgraduate psychology students completing higher degrees. This may make them less representative of the population of clinicians as a whole. However, this was balanced by the use of other therapists with many years of experience. This in fact constituted one of the differences between clinics,

11.6.9 Sample size

Although this study found significant results, the number of therapists constituting level 3 of the analysis was not large. A study using a larger sample might find other significant results regarding attachment which this study failed to find.

11.6.10 Use of modified wording in the ECR

The modified wording used for the ECR, in which the phrase "romantic partner" was replaced in many places with "other people" or "people I'm close to" and in other cases simply with "partner", may have affected the structure of the ECR by leading respondents to bring to mind differing working models of attachment when answering different items. Similar changes in wording have been used by other investigators, but it is noted that at least one of those failed to confirm the factor structure normally associated with the ECR (Lo, et al., 2009).

11.7 Research strengths

11.7.1 Extending our knowledge

This study takes a phenomenon for which there is considerable empirical support but little validated explanation and provides an empirically supported explanation. The phenomenon in question is differential therapist effectiveness. The explanation is that some therapists are better mentalizers than others. Of course, this shifts the question to "how do they become better mentalizers", a question which has been partially answered by other

research, but requires further investigation. Nevertheless, this study makes a substantial contribution, both in terms of the answers it provides and in terms of the questions it poses. Although many threads have converged over the years to suggest that the capacity of the therapist to mentalize while under affective stress might be a relevant factor in explaining differences in therapist effectiveness, most previous research on reflective functioning has measured the reflective functioning status of clients rather than therapists. Despite the fact that several studies have explored the role of related concepts, such as empathy, the few studies that have previously examined therapist reflective functioning have not related it to outcome or effectiveness. This study has filled that gap and thereby extended our knowledge.

11.7.2 Theoretical depth

The research in this study is built on an extensive theoretical foundation. Links are drawn between a number of traditions, including attachment theory, cognitive science, social psychology, psychoanalysis, phenomenology and humanistic psychology, to name a few. Concepts from disparate lines of enquiry are juxtaposed and links discovered between them, building a research foundation with multiple pillars of support.

11.7.3 Ecological validity

The study conditions were real-world conditions, as a result of which this study has strong ecological validity. The use of therapists from more than one discipline and in more than one setting also enhances the external validity of the study. In addition, since the study combines multiple data collection methods, including self-report and interview, and utilises multiple perspectives, including client self-report, therapist self-report and third party ratings, this study is less likely to suffer from method bias than many studies.

11.7.4 Statistical analysis

The use of hierarchical linear modelling as a statistical method is another strength of this study. Hierarchical linear models have the capability to clarify trends even when observations are missing for some persons across the waves of data collection. Hierarchical linear models can also accommodate situations in which the time of data collection might vary across persons. Both of these situations are quite common in longitudinal research, and neither is addressed adequately through general linear methods. Hierarchical linear models can handle missing data across levels of dependent variables and allow for within-subjects and/or between-subjects heterogeneity. Hierarchical linear models explicitly model the covariance structure of the data, permit time to be treated as a fixed or random effect and do not require the assumption of sphericity (Bryk & Raudenbush, 1988; Bryk & Raudenbush, 1992; Todd, et al., 2005).

11.7.5 Outcome measurement

The use of the OQ-45 as an outcome measure is also a strength, notwithstanding its self-report nature, and the desirability of also including a measure of structural change in personality. The OQ-45 is a well validated measure which has been used in the vast majority of the therapist effects literature which this study seeks to explain. The OQ-45 is responsive to changes over time and is reported to correlate with other self-report measures commonly used to assess outcome, such as the Beck Depression Inventory (Vermeersch, et al., 2000). Unlike studies in which outcome is explored by applying a measure before therapy begins and at the conclusion, this study measured outcome at every session of therapy for every client, meaning that all fluctuations are taken account of in determining therapist effectiveness.

11.8 Directions for future research

This study has found an important link between therapist reflective functioning and therapist effectiveness. In addition, it has failed to find a direct link between attachment security and therapist effectiveness, but instead found an interaction between self-reported attachment anxiety and reflective functioning. This interaction means that those therapists whose reflective functioning exceeds their relative degree of attachment anxiety are likely to be effective therapists, whereas those whose relative degree of attachment anxiety exceeds their reflective functioning are likely to be ineffective therapists. All of these findings clearly need replication, preferably with a larger sample. The AAI attachment aspects of this study need to be repeated with coders who have better inter-rater reliability than those involved in this study.

In addition to replication and validation of the findings of this study, numerous other areas for future research are suggested by the findings reported here. If reflective functioning is an important ingredient in therapist effectiveness, then the extent to which training can enhance reflective functioning is a question in urgent need of an answer. If it can be shown that particular methods of training enhance reflective functioning, then that would have significant implications for the training of psychotherapists. Future research might develop training programs for reflective functioning or borrow some of those in use by those involved in mentalization based treatment and test the extent to which such programs are able to increase RF.

It would also be useful for future research to explore measuring therapist effectiveness using a measure of structural change in personality. As discussed in CHAPTER 2, it has been argued, and some research has provided evidence to back up the assertion, that measures of structural change in personality assess change that endures longer than the change measured by self-report measures. It is important to know whether reflective functioning predicts effectiveness as defined in terms of structural change in personality. Given the relative

complexity of administering existing measures of structural change in personality, it might also be worthwhile for future research to explore the development of more easily administered measures of structural change in personality. One possible avenue for such exploration might involve adaptation of the implicit association test to produce measures of change based on implicit rather than explicit knowledge.

Further research should investigate the extent to which the therapeutic alliance is a mediating variable in the relationships reported here. As a result of some practical issues that arose, the role of the alliance was not investigated in this study, so it is not clear whether therapists with high RF are more effective because they form better alliances, or whether RF has effects on effectiveness that are independent of the alliance. The fact that fearful attachment has been found previously to correlate with the alliance (Coon, 2007), as mentioned earlier, suggests that the alliance may play a role in the interaction reported here between attachment style, RF and effectiveness. That possibility requires empirical verification.

Application of the reflective functioning scale to transcripts of adult attachment interviews with therapists produced a result in this study that was significantly predictive of therapist effectiveness. However, the process of conducting adult attachment interviews, transcribing them and scoring them for reflective functioning is quite arduous. Research is needed into less labour intensive ways of measuring reflective functioning. Although the MASC seemed promising as a potential measure, the correlation of 0.41 between the MASC and RF in this study suggests that the MASC, at least in its current form, is not measuring the same thing. This is not altogether surprising, in that although the MASC has been suggested as a possible measure of reflective functioning, the MASC was developed for the purpose of distinguishing people on the autism spectrum from those who are not autistic, which it does well. If what it measures is the same construct as RF, it may be targeted at a lower level of RF than that which is relevant to therapist effectiveness. As mentioned earlier, however, this

does not appear to be a ceiling effect, but there may be other reasons for it, which might be amenable to alteration. It may be that a future modification of the MASC might enable it to measure something closer to RF. On the other hand, it may be possible to develop a similar measure, involving responses to a different movie – perhaps one based on family interactions rather than social interactions between friends – that taps the construct of RF, as measured by the reflective functioning scale, better. In doing so, it might be possible to modify the instrument so that there was some focus on the intrapersonal as well as the interpersonal aspects of RF. This might be done, for example, by constructing questions and answers on the same basis as those used in the mentalizing stories test for adolescents (MSTA: Vrouva, et al., 2012), in which some answers to each question reference the model of self of the protagonist.

In terms of alternatives to the reflective functioning scale, efforts have already been made at developing alternatives to the adult attachment interview, to which the scale can be applied. One approach has been to use a shortened version of the AAI in which only the questions labelled as "demand questions" by the RF protocol – that is, those questions that "demand" or require reflective functioning in order to give an appropriate answer – are asked (Rudden, Milrod, Target, Ackerman, & Graf, 2006). Another approach has been to apply the scale to interviews other than the AAI, which also ask questions about family dynamics, such as the Parent Development Interview (PDI: Slade, et al., 1999), for which specific training in the application of the reflective functioning scale has been developed (Crumbley, 2010). The RF scale has also been applied to symptom specific interviews, such as interviews related to panic disorder (Rudden, et al., 2006). A useful direction for future research would be the development of a shortened interview specific to therapist effectiveness to which the RF scale might be applied.

The reflective functioning scale is applied to transcripts of the adult attachment interview. That is, it is applied to written material which has been transcribed from verbal

material. This complicates the process. Future research might investigate a) whether valid results would be obtained by collecting written material and applying the RF scale to it, thus bypassing the need for interviews and transcription and/or b) applying the RF scale directly to recording of interviews, thus bypassing the transcription process.

Finally, given that the highly trained and experienced accredited raters used for scoring the AAI for attachment in this study failed to achieve acceptable inter-rater reliability, further research is needed into whether the AAI is suitable for use in this type of sample. Furthermore, research may also be needed into the extent to which reliability of trained raters is retained over time. Further research might also address ways of maintaining consistency of rating and/or alternative ways of assessing the aspects of attachment thought to be tapped by the AAI.

11.9 Conclusion

It has been becoming increasingly clear over the past two decades that some psychotherapists are more effective than others (Bergin, 1963; Beutler, 1997; Blatt, et al., 1996; Brown, et al., 2005; Crits-Christoph & Mintz, 1991; Lafferty, et al., 1989; Lambert, 1989; Luborsky, et al., 1986; Luborsky, et al., 1997; Luborsky, et al., 1985; Lutz, et al., 2007; Najavits & Strupp, 1994; Okiishi, et al., 2003; Okiishi, et al., 2006; Shapiro, et al., 1989). As was discussed in detail in Chapter 4 of this work, it is also clear that differences in therapist effectiveness are not explained by differences in the level of therapist experience, education or training. Furthermore, as discussed in Chapter 3, effectiveness is also explained neither by differences in adherence to specific techniques, nor by differential competence in the application of specific techniques. This left a gap in our knowledge regarding what makes therapists effective. This study has demonstrated that one of the things that make therapists effective is a well-developed ability to mentalize, or reflect on the mental processes, including cognitive and affective processes, that take place both intrapsychically and

interpersonally in their lives and in the therapy room, an ability known as reflective functioning. While not surprising, this has implications for our understanding of therapy and therapists and also for the selection and training of therapists. Research into reflective functioning has suggested a significant role for reflective functioning in protecting people from the effects of attachment trauma and overcoming childhood difficulties (Bateman, et al., 2009). This paper suggests that people who are protected from such trauma through the development of reflective functioning may be among those who make good therapists – an idea that is consistent with the tradition of the wounded healer.

References

Aaronson, B. D. (2009). *Parental bonding memories, adult attachment, interpersonal problems, and perceptions of maternal depression.* 70 Ph.D. dissertation, Fordham University, United States - New York. Retrieved August 6, 2010, from Dissertations & Theses: Full Text.(Publication No. AAT 3373822).

Ainsworth, M. D. (1979). Infant--mother attachment. *The American Psychologist, 34*(10), 932-937.

Ainsworth, M. D., & Bell, S. M. (1970). Attachment, exploration, and separation: illustrated by the behavior of one-year-olds in a strange situation. *Child Development, 41*(1), 49-67.

Ainsworth, M. D. S. (1967). *Infancy in Uganda: infant care and the growth of love*. Oxford England: Johns Hopkins Press.

Ainsworth, M. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Oxford England: Lawrence Erlbaum.

Ainsworth, M. S., & Bowlby, J. (1991). An ethological approach to personality development. *American Psychologist, 46*(4), 333-341.

Albani, C., Blaser, G., Körner, A., König, S., Marschke, F., Geissler, I., et al. (2002). [Connections between attachment prototypes and relationship patterns]. *Psychotherapie, Psychosomatik, Medizinische Psychologie, 52*(12), T67-T75.

Alcorn, L. M., & Torney, D. J. (1982). Counselor Cognitive Complexity of Self-Reported Emotional Experience as a Predictor of Accurate Empathic Understanding. *Journal of Counseling Psychology, 29*(5), 534-537.

Allen, J. G. (2003). Mentalizing. *Bulletin of the Menninger Clinic, 67*(2), 91-112.

Allen, J. G. (2006). Mentalizing in practice *The handbook of mentalization-based treatment.* (pp. 3-30). Hoboken, NJ US: John Wiley & Sons Inc.

Allen, J. G., & Fonagy, P. (2006). *The handbook of mentalization-based treatment*. Hoboken, NJ US: John Wiley & Sons Inc.

Anderson, T., Crowley, M.E., & Carson, K.L. (2001). *Therapist interpersonal skills (but not training) influences outcome and alliance.* Paper presented at the 109th annual convention of the American Psychological Association, San Francisco, CA.

Anderson, T., Ogles, B. M., Patterson, C. L., Lambert, M. J., & Vermeersch, D. A. (2009). Therapist Effects: Facilitative Interpersonal Skills as a Predictor of Therapist Success. [Article]. *Journal of Clinical Psychology, 65*(7), 755-768. doi: 10.1002/jclp.20583

Anderson, T., Ogles, B. M., & Weis, A. (1999). Creative use of interpersonal skills in building a therapeutic alliance. *Journal of Constructivist Psychology, 12*(4), 313-330.

Armstrong, J. (2010). How effective are minimally trained/experienced volunteer mental health counsellors? Evaluation of CORE outcome data. *Counselling and Psychotherapy Research: Linking research with practice, 10*(1), 22 - 31.

Aron, L. (2000). Self-reflexivity and the therapeutic action of psychoanalysis. *Psychoanalytic Psychology, 17*(4), 667-689.

Arsenian, J. M. (1943). Young children in an insecure situation. *The Journal of Abnormal and Social Psychology, 38*(2), 225-249.

Atkins, D. C., & Christensen, A. (2001). Is professional training worth the bother? A review of the impact of psychotherapy training on client outcome. *Australian Psychologist, 36*(2), 122-131.

Bachelor, A. (1988). How clients perceive therapist empathy: A content analysis of 'received' empathy. *Psychotherapy: Theory, Research, Practice, Training, 25*(2), 227-240.

Bachelor, A., & Salame, R. (2000). Participants' Perceptions of Dimensions of the Therapeutic Alliance Over the Course of Therapy. *J Psychother Pract Res, 9*(1), 39-53.

Bakermans-Kranenburg, M. J., & van Ijzendoorn, M. H. (2009). The first 10,000 Adult Attachment Interviews: distributions of adult attachment representations in clinical and non-clinical groups. *Attachment & Human Development, 11*(3), 223-263.

Baldwin, S. A., & Imel, Z. E. (2013). Therapist Effects: Findings and Methods. In M. J. Lambert (Ed.), *Bergin and Garfield's Handbook of Psychotherapy and Behavior Change* (6th ed., pp. 415-456). Hokoben, New Jersey: John Wiley & Sons.

Baldwin, S. A., Wampold, B. E., & Imel, Z. E. (2007). *Untangling the alliance-outcome correlation: Exploring the relative importance of therapist and patient variability in the alliance*.

Barber, J. P., Connolly, M. B., Crits-Christoph, P., Gladis, L., & Siqueland, L. (2000). Alliance predicts patients' outcome beyond in-treatment change in symptoms. *Journal of Consulting and Clinical Psychology, 68*(6), 1027-1032.

Barber, J. P., Connolly, M. B., Crits-Christoph, P., Gladis, L., & Siqueland, L. (2009). Alliance predicts patients' outcome beyond in-treatment change in symptoms. *Personality Disorders: Theory, Research, and Treatment*(1), 80-89.

Baron-Cohen, S., Wheelwright, S., Hill, J., Raste, Y., & Plumb, I. (2001). The 'Reading the mind in the eyes' Test revised version: A study with normal adults, and adults with Asperger syndrome or high-functioning autism. *Journal of Child Psychology and Psychiatry, 42*(2), 241-251.

Barrett-Lennard, G. T. (1962). Dimensions of therapist response as causal factors in therapeutic change. *Psychological Monographs: General and Applied, 76*(43), 1-36.

Barrett-Lennard, G. T. (1998). *Carl Rogers' Helping System: Journey and Substance*: Sage Publications.

Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships, 7*(2), 147-178.

Bateman, A., Fonagy, P., Allen, J. G., & Gabbard, G. O. (2009). Theory and practice of mentalization-based therapy *Textbook of psychotherapeutic treatments.* (pp. 757-780). Arlington, VA US: American Psychiatric Publishing, Inc.

Beckman, H. T., & Lueger, R. J. (1997). Readability of self-report clinical outcome measures. *Journal of Clinical Psychology, 53*(8), 785-789.

Bekendam, C. C. (1997). *Dimensions of emotional intelligence: Attachment, affect regulation, alexithymia and empathy.* Ph.D., The Fielding Institute, United States -- California. Retrieved from http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/304415605?accountid=13380
http://sf5mc5tj5v.search.serialssolutions.com/?ctx_ver=Z39.88-2004&ctx_enc=info:ofi/enc:UTF-8&rfr_id=info:sid/ProQuest+Dissertations+%26+Theses+%28PQDT%29&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&rft.genre=dissertations+%26+theses&rft.jtitle=&rft.atitle=&rft.au=Bekendam%2C+Carol+Corwin&rft.aulast=Bekendam&rft.aufirst=Carol&rft.date=1997-01-01&rft.volume=&rft.issue=&rft.spage=&rft.isbn=9780591382709&rft.btitle=&rft.title=Dimensions+of+emotional+intelligence%3A+Attachment%2C+affect+regulation%2C+alexithymia+and+empathy&rft.issn=

Benjamin, L. S. (1974). Structural analysis of social behavior. *Psychological Review, 81*(5), 392-425.

Bergin, A. E. (1963). The effects of psychotherapy: Negative results revisited. *Journal of Counseling Psychology, 10*, 244-250.

Bergin, A. E., & Suinn, R. M. (1975). Individual psychotherapy and behavior therapy. *Annual Review of Psychology, 26*, 509-556.
Beutler, L. E. (1983). *Eclectic psychotherapy: A systematic approach*. New York: Pergamon.
Beutler, L. E. (1997). The psychotherapist as a neglected variable in psychotherapy: An illustration by reference to the role of therapist experience & training. *Clinical Psychology: Science and Practice, 4*(1), 44-52.
Beutler, L. E., Malik, M., Alimohamed, S., Harwood, T. M., Talebi, H., Noble, S., et al. (2004). Therapist variables. In L. MJ (Ed.), *Bergin and Garfield's Handbook of Psychotherapy and Behavior Change* (pp. 227-306). New York: John Wiley & Sons.
Beyer, C. (2011). Edmund Husserl. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy* (Winter 2011 Edition ed.).
Bion, W. R. (1970/2012). *Attention and Interpretation*: Karnac Books.
Blaas, C. D., & Heck, E. J. (1978). Selected process variables as a function of client type and cognitive complexity in beginning counselors. *Journal of Counseling Psychology, 25*(4), 257-263.
Black, S., Hardy, G., Turpin, G., & Parry, G. (2005). Self-reported attachment styles and therapeutic orientation of therapists and their relationship with reported general alliance quality and problems in therapy. [Article]. *Psychology and Psychotherapy-Theory Research and Practice, 78*, 363-377. doi: 10.1348/147608305x43784
Blatt, S. J., Sanislow, C. A., III, Zuroff, D. C., & Pilkonis, P. A. (1996). Characteristics of effective therapists: Further analyses of data from the National Institute of Mental Health Treatment of Depression Collaborative Research Program. *Journal of Consulting and Clinical Psychology, 64*(6), 1276-1284.
Blumberg, P. B. (1998). *Adult attachment and the organization of affective experience.* 58, ProQuest Information & Learning, US. Retrieved from http://gateway.library.qut.edu.au/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=1998-95008-056&site=ehost-live
Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, Research & Practice, 16*(3), 252-260.
Bouchard, M.-A., Target, M., Lecours, S., Fonagy, P., Tremblay, L.-M., Schachter, A., et al. (2008). Mentalization in adult attachment narratives: Reflective functioning, mental states, and affect elaboration compared. *Psychoanalytic Psychology, 25*(1), 47-66.
Bouchard, M. A., Audet, C., Picard, C., Carrier, M., & Milcent, M. P. (2001). *The Mental States Rating System. Scoring manual.*
. Departement de Psychologie. Université de Montréal.
Bowlby, J. (1951). Maternal care and mental health. *Bulletin Of The World Health Organization, 3*(3), 355-533.
Bowlby, J. (1958). The nature of the child's tie to his mother. *The International Journal of Psychoanalysis, 39*, 350-373.
Bowlby, J. (1980). *Attachment and loss*. New York, NY US: Basic Books.
Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York, NY US: Basic Books.
Bozarth, J. D., & Wang, C.-C. (2008). The 'unitary actualizing tendency' and congruence in client-centered theory *Reflections on human potential: Bridging the person-centered approach and positive psychology.* (pp. 102-115). Ross-on-Wye England: PCCS Books.
Brennan, K., & Shaver, P. (1995). Dimensions of Adult Attachment, Affect Regulation, and Romantic Relationship Functioning. *Personality And Social Psychology Bulletin, 21*(3), 267-283.

Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview *Attachment theory and close relationships.* (pp. 46-76). New York, NY US: Guilford Press.

Bretherton, I. (1985). ATTACHMENT THEORY: RETROSPECT AND PROSPECT. *Monographs of the Society for Research in Child Development, 50*(1/2), 3-35.

Bretherton, I. (1992). The Origins of Attachment Theory: John Bowlby and Mary Ainsworth. *Developmental Psychology, 28*(5), 759-775.

Brown, G. S., Lambert, M. J., Jones, E. R., & Minami, T. (2005). Identifying highly effective psychotherapists in a managed care environment. *American Journal of Managed Care, 11*(8), 513-520.

Bryk, A. S., & Raudenbush, S. W. (1988). Toward a More Appropriate Conceptualization of Research on School Effects: A Three-Level Hierarchical Linear Model. *American Journal of Education, 97*(1), 65-108. doi: 10.2307/1084940

Bryk, A. S., & Raudenbush, S. W. (1992). *Hierarchical linear models: Applications and data analysis methods*. Thousand Oaks, CA US: Sage Publications, Inc.

Buller-Taylor, T. L. (1999). *Self-esteem and achievement: Ethnicity, gender, parental love and coping styles.* 59 Ph.D. dissertation, The University of British Columbia, Canada. Retrieved August 6, 2010, from Dissertations & Theses: Full Text.(Publication No. AAT NQ34535).

Buser, T. (2008). Counselor Training: Empirical Findings and Current Approaches. *Counselor Education and Supervision, 48*(2), 86-100.

Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin, 56*(2), 81-105.

Cannava, P. P. (2000). *Attachment styles and the interpersonal circumplex.* 61 Ph.D. dissertation, Pacific Graduate School of Psychology, United States -- California. Retrieved August 6, 2010, from Dissertations & Theses: Full Text.(Publication No. AAT 9969064).

Carkhuff, R. R., & Truax, C. B. (1965). Training in counseling and psychotherapy: an evaluation of an integrated didactic and experiential approach. *Journal Of Consulting Psychology, 29*(4), 333-336.

Carnelley, K. B., & Brennan, K. A. (2002). Building bridges. *Attachment & Human Development, 4*(2), 189 - 192.

Cartwright, R. D., & Lerner, B. (1963). Empathy, need to change and improvement with psychotherapy. *Journal of Consulting Psychology, 27*(2), 138-144.

Castonguay, L. G., Goldfried, M. R., Wiser, S., Raue, P. J., & Hayes, A. M. (1996). Predicting the effect of cognitive therapy for depression: A study of unique and common factors. *Journal of Consulting and Clinical Psychology, 64*(3), 497-504.

Castonguay, L. G., & Holtforth, M. G. (2005). Change in Psychotherapy: A Plea for No More 'Nonspecific' and False Dichotomies. *Clinical Psychology: Science and Practice, 12*(2), 198-201.

Chen, E. C., & Mallinckrodt, B. (2002). Attachment, group attraction and self-other agreement in interpersonal circumplex problems and perceptions of group members. *Group Dynamics: Theory, Research, and Practice, 6*(4), 311-324.

Chinsky, J. M., & Rappaport, J. (1970). Brief critique of the meaning and reliability of 'accurate empathy' ratings. *Psychological Bulletin, 73*(5), 379-382.

Cho-Kain, L. W., & Gunderson, J. G. (2008). Mentalization: Ontogeny, Assessment, and Application in the Treatment of Borderline Personality Disorder. *The American Journal of Psychiatry, 165*(9), 1127-1135.

Christensen, A., & Jacobson, N. S. (1994). Who (or what) can do psychotherapy: The Status and Challenge of Nonprofessional Therapies. *Psychological Science, 5*(1), 8-14.

Coady, N. F. (1990). *Interpersonal process and counselling outcome: An exploratory study of the worker-client relationship.* Ph.D. dissertation, University of Toronto, Canada. Retrieved from Dissertations & Theses: Full Text.(Publication No. AAT NL56978) Retrieved August 5, 2010

Cohn, D. A., Cowan, P. A., Cowan, C. P., & Pearson, J. (1992). Mothers' and fathers' working models of childhood attachment relationships, parenting styles, and child behavior. *Development And Psychopathology, 4*(03), 417-431. doi: doi:10.1017/S0954579400000870

Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology, 58*(4), 644-663.

Coon, C. L. (2007). *Therapist attachment style and trust as predictors of alliance with clients.* Psy.D., University of Northern Colorado, United States - Colorado. Retrieved August 30, 2010, from Dissertations & Theses: Full Text.(Publication No. AAT 3309192).

Cornelius-White, J. H. D. (2007a). Congruence as Extensionality / Kongruenz als Extensionalität / La congruencia como extensionalidad / La congruence conçue comme extensionalité / A congruência como extensionalidade. *Person-Centered & Experiential Psychotherapies, 6*(3), 196-204. doi: 10.1080/14779757.2007.9688442

Cornelius-White, J. H. D. (2007b). Congruence: An integrative five-dimension model / Kongruenz: Ein integratives Modell mit fünf Dimensionen / Congruencia: Un modelo integrativo de cinco dimensiones / La Congruence: Un modèle intégratif en cinq dimensions / Congruência: Um modelo integrativo em cinco dimensões. *Person-Centered & Experiential Psychotherapies, 6*(4), 229-239. doi: 10.1080/14779757.2007.9688444

Craik, K. (1943). *The nature of explanation*. Cambridge: Cambridge University Press.

Crandell, L. E. (1994). *Representational models of attachment: Replication and reorganizational processes.* Ph.D., Michigan State University, United States -- Michigan. Retrieved from http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/304129525?accountid=13380

http://sf5mc5tj5v.search.serialssolutions.com/?ctx_ver=Z39.88-2004&ctx_enc=info:ofi/enc:UTF-8&rfr_id=info:sid/ProQuest+Dissertations+%26+Theses+%28PQDT%29&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&rft.genre=dissertations+%26+theses&rft.jtitle=&rft.atitle=&rft.au=Crandell%2C+Lisa+Elaine&rft.aulast=Crandell&rft.aufirst=Lisa&rft.date=1994-01-01&rft.volume=&rft.issue=&rft.spage=&rft.isbn=&rft.btitle=&rft.title=Representational+models+of+attachment%3A+Replication+and+reorganizational+processes&rft.issn=

Crandell, L. E., Fitzgerald, H. E., & Whipple, E. E. (1997). Dyadic synchrony in parent–child interactions: A link with maternal representations of attachment relationships. *Infant Mental Health Journal, 18*(3), 247-264. doi: 10.1002/(sici)1097-0355(199723)18:3<247::aid-imhj2>3.0.co;2-k

Crits-Christoph, P., Gibbons, M. B. C., Hamilton, J., Ring-Kurtz, S., & Gallop, R. (2011). The dependability of alliance assessments: The alliance–outcome correlation is larger than you might think. *Journal of Consulting and Clinical Psychology, 79*(3), 267-278.

Crits-Christoph, P., & Mintz, J. (1991). Implications of therapist effects for the design and analysis of comparative studies of psychotherapies. *Journal of Consulting and Clinical Psychology, 59*(1), 20-26.

Crowell, J. A., & Treboux, D. (1995). A review of adult attachment measures: Implications for theory and research. *Social Development, 4*(3), 294-327.
Crowell, J. A., Treboux, D., & Waters, E. (1999). The Adult Attachment Interview and the Relationship Questionnaire: Relations to reports of mothers and partners. *Personal Relationships, 6*(1), 1-18.
Crowell, J. A., Treboux, D., & Waters, E. (2002). Stability of attachment representations: The transition to marriage. *Developmental Psychology, 38*(4), 467-479.
Crowell, J. A., Waters, E., Treboux, D., O'Connor, E. O., Colon-Downs, C., Feider, O., et al. (1996). Discriminant validity of the adult attachment interview. *Child Development, 67*(5), 2584-2599.
Crumbley, A. H. (2010). *The relationship specificity of the reflective function: An empirical investigation.* Ph.D. dissertation, City University of New York, United States - New York. Retrieved August 30, 2010, from Dissertations & Theses: Full Text.(Publication No. AAT 3378556).
Dattilo, G. (2005). *The role of attachment style on clinician self-efficacy and empathy.* Psy.D., La Salle University, United States -- Pennsylvania. Retrieved from http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/305362029?accountid=13380
http://sf5mc5tj5v.search.serialssolutions.com/?ctx_ver=Z39.88-2004&ctx_enc=info:ofi/enc:UTF-8&rfr_id=info:sid/ProQuest+Dissertations+%26+Theses+%28PQDT%29&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&rft.genre=dissertations+%26+theses&rft.jtitle=&rft.atitle=&rft.au=Dattilo%2C+GinaMarie&rft.aulast=Dattilo&rft.aufirst=GinaMarie&rft.date=2005-01-01&rft.volume=&rft.issue=&rft.spage=&rft.isbn=9780542839528&rft.btitle=&rft.title=The+role+of+attachment+style+on+clinician+self-efficacy+and+empathy&rft.issn=
David, F. B., Philinda, S. H., Heather, J. K., Howard, L. T., & et al. (2005). INCREASING EMPATHIC ACCURACY THROUGH PRACTICE AND FEEDBACK IN A CLINICAL INTERVIEWING COURSE. *Journal of Social and Clinical Psychology, 24*(2), 156-171.
Davis, M. H. (1980). *Individual differences in empathy: A multidimensional approach.* 40, The University of Texas at Austin, United States - Texas. Retrieved August 30, 2010, from Dissertations & Theses: Full Text.(Publication No. AAT 7928276).
Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology, 44*(1), 113-126.
Decety, J. (2010). To What Extent is the Experience of Empathy Mediated by Shared Neural Circuits? *Emotion Review, 2*(3), 204-207.
Decety, J., & Meyer, M. (2008). From emotion resonance to empathic understanding: A social developmental neuroscience account. *Development and Psychopathology, 20*(4), 1053-1080.
Del Re, A. C., Horvath, A. O., Flückiger, C., Symonds, D., & Wampold, B. E. (2012). Therapist effects in the therapeutic alliance-outcome relationship: A restricted-maximum likelihood meta-analysis. *Clinical Psychology Review*(0).
Demers, I., Bernier, A., Tarabulsy, G. M., & Provost, M. A. (2010). Maternal and child characteristics as antecedents of maternal mind-mindedness
[Article]. *Infant Mental Health Journal, 31*(1), 94-112. doi: 10.1002/imhj.20244
den Boer, P. C. A. M., Wiersma, D., Russo, S., & van den Bosch, R. J. (2005). Paraprofessionals for anxiety and depressive disorders. *Cochrane Database Of Systematic Reviews (Online)*(2), CD004688.

di Pellegrino, G., Fadiga, L., Fogassi, L., Gallese, V., & Rizzolatti, G. (1992). Understanding motor events: a neurophysiological study. *Experimental Brain Research. Experimentelle Hirnforschung. Expérimentation Cérébrale, 91*(1), 176-180.

Diamond, D., Stovall-McClough, C., Clarkin, J. F., & Levy, K. N. (2003). Patient-therapist attachment in the treatment of borderline personality disorder. *Bulletin of the Menninger Clinic, 67*(3), 227-259.

Dick, A., Vanderbilt, S., Jacot, C., Hurni, F., Jäggi, C., & Leiggener, E. (2005). Erinnertes elterliches Erziehungsverhalten und aktuelle Bindungsorganisation im Erwachsenenalter: Unterschiede zwischen Personen mit und ohne Angststörungen. *Zeitschrift für Klinische Psychologie und Psychotherapie: Forschung und Praxis, 34*(1), 35-38.

Dinger, U., Strack, M., Leichsenring, F., Wilmers, F., & Schauenburg, H. (2008). Therapist effects on outcome and alliance in inpatient psychotherapy. [Article]. *Journal of Clinical Psychology, 64*(3), 344-354. doi: 10.1002/jclp.20443

Doerfler, L. A., Addis, M. E., & Moran, P. W. (2002). Evaluating Mental Health Outcomes in an Inpatient Setting: Convergent and Divergent Validity of the OQ-45 and BASIS-32. *Journal of Behavioral Health Services & Research, 29*(4), 394.

Donnellan, M. B. (2008). Genes, Personality, and Attachment in Adults: A Multivariate Behavioral Genetic Analysis. *Personality and Social Psychology Bulletin, 34*(1), 3-16.

Doty, D. H., & Glick, W. H. (1998). Common Methods Bias: Does Common Methods Variance Really Bias Results? *Organizational Research Methods, 1*(4), 374-406. doi: 10.1177/109442819814002

Dozier, M., Cue, K. L., & Barnett, L. (1994). Clinicians as caregivers: Role of attachment organization in treatment. *Journal of Consulting and Clinical Psychology, 62*(4), 793-800.

Duan, C., & Hill, C. E. (1996). The current state of empathy research. *Journal of Counseling Psychology, 43*(3), 261-274.

Duquette, P. (2010). Reality Matters: Attachment, the Real Relationship, and Change in Psychotherapy. *American Journal Of Psychotherapy, 64*(2), 127-151.

Dziobek, I., Fleck, S., Kalbe, E., Rogers, K., Hassenstab, J., Brand, M., et al. (2006). Introducing MASC: A Movie for the Assessment of Social Cognition. *Journal of Autism & Developmental Disorders, 36*(5), 623-636.

Eagle, M., Wolitzky, D. L., Obegi, J. H., & Berant, E. (2009). Adult psychotherapy from the perspectives of attachment theory and psychoanalysis *Attachment theory and research in clinical work with adults.* (pp. 351-378). New York, NY US: Guilford Press.

Eames, V., & Roth, A. (2000). Patient Attachment Orientation and the Early Working Alliance-A Study of Patient and Therapist Reports of Alliance Quality and Ruptures. *Psychotherapy Research, 10*(4), 421-434. doi: 10.1093/ptr/10.4.421

Elkin, I. (1994). The NIMH Treatment of Depression Collaborative Research Program: Where we began and where we are *Handbook of psychotherapy and behavior change (4th ed.).* (pp. 114-139). Oxford England: John Wiley & Sons.

Elkin, I., Falconnier, L., Martinovich, Z., & Mahoney, C. (2006). Therapist effects in the National Institute of Mental Health Treatment of Depression Collaborative Research Program. *Psychotherapy Research, 16*(2), 144-160.

Elkin, I., Shea, M. T., Watkins, J. T., Imber, S. D., Sotsky, S. M., Collins, J. F., et al. (1989). National Institute of Mental Health Treatment of Depression Collaborative Research Program. General effectiveness of treatments. *Archives of General Psychiatry, 46*(11), 971-982.

Elliott, R., Bohart, A. C., Watson, J. C., & Greenberg, L. S. (2011). Empathy. *Psychotherapy, 48*(1), 43-49.

Elliott, R., & et al. (1982). Differential Helpfulness of Counselor Verbal Response Modes. *Journal of Counseling Psychology, 29*(4), 354-361.

Elliott, R., & Farber, B. A. (2010). Carl Rogers: Idealistic pragmatist and psychotherapy research pioneer *Bringing psychotherapy research to life: Understanding change through the work of leading clinical researchers.* (pp. 17-27). Washington, DC US: American Psychological Association.

Elliott, R., Watson, J. C., Goldman, R. N., & Greenberg, L. S. (2004). Process-experiential theory made simple *Learning emotion-focused therapy: The process-experiential approach to change.* (pp. 19-41). Washington, DC US: American Psychological Association.

Ellison, J. A., Greenberg, L. S., Goldman, R. N., & Angus, L. (2009). Maintenance of gains following experiential therapies for depression. *Journal of Consulting and Clinical Psychology, 77*(1), 103-112.

Ensink, K., & Mayes, L. C. (2010). The Development of Mentalisation in Children From a Theory of Mind Perspective. *Psychoanalytic Inquiry: A Topical Journal for Mental Health Professionals, 30*(4), 301 - 337.

Erlanger, D. M. (1996). *Empathy, attachment style, and identity development in undergraduates.* Ph.D., Columbia University, United States -- New York. Retrieved from http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/304246115?accountid=13380

http://sf5mc5tj5v.search.serialssolutions.com/?ctx_ver=Z39.88-2004&ctx_enc=info:ofi/enc:UTF-8&rfr_id=info:sid/ProQuest+Dissertations+%26+Theses+%28PQDT%29&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&rft.genre=dissertations+%26+theses&rft.jtitle=&rft.atitle=&rft.au=Erlanger%2C+David+Michael&rft.aulast=Erlanger&rft.aufirst=David&rft.date=1996-01-01&rft.volume=&rft.issue=&rft.spage=&rft.isbn=&rft.btitle=&rft.title=Empathy%2C+attachment+style%2C+and+identity+development+in+undergraduates&rft.issn=

Farber, B. A., & Doolin, E. M. (2011). Positive regard. *Psychotherapy, 48*(1), 58-64.

Farber, B. A., Lippert, R. A., & Nevas, D. B. (1995). The therapist as attachment figure. *Psychotherapy: Theory, Research, Practice, Training, 32*(2), 204-212.

Farber, B. A., Manevich, I., Metzger, J., & Saypol, E. (2005). Choosing psychotherapy as a career: Why did we cross that road? *Journal of Clinical Psychology, 61*(8), 1009-1031.

Farber, B. A., Metzger, J. A., Obegi, J. H., & Berant, E. (2009). The therapist as secure base *Attachment theory and research in clinical work with adults.* (pp. 46-70). New York, NY US: Guilford Press.

Faris, A. S., Cavell, T. A., Fishburne, J. W., & Britton, P. C. (2009). Examining, Motivational Interviewing From a Client Agency Perspective. [Article]. *Journal of Clinical Psychology, 65*(9), 955-970. doi: 10.1002/jclp.20599

Farson, R. (1975). Carl Rogers, Quiet Revolutionary. In R. I. Evans (Ed.), *Carl Rogers: The Man and His Ideas*. New York: E.P Dutton & Co.

Fast, L. A., Reimer, H. M., & Funder, D. C. (2008). The social behavior and reputation of the attributionally complex. *Journal of Research in Personality, 42*(1), 208-222.

Faust, D., & Zlotnick, C. (1995). Another dodo bird verdict - revisiting the comparative effectiveness of professional and paraprofessional therapists. [Article]. *Clinical Psychology & Psychotherapy, 2*(3), 157-167.

Flavell, J. H. (2004). Theory-of-mind development: Retrospect and prospect. *Merrill-Palmer Quarterly, 50*(3), 274-290.

Fletcher, G. J. O., Danilovics, P., Fernandez, G., Peterson, D., & Reeder, G. D. (1986). Attributional complexity: An individual differences measure. *Journal of Personality and Social Psychology, 51*(4), 875-884.
Fonagy, P. (1998a). An attachment theory approach to treatment of the difficult patient. *Bulletin of the Menninger Clinic, 62*(2), 147.
Fonagy, P. (1998b). Moments of change in psychoanalytic theory: Discussion of a new theory of psychic change. *Infant Mental Health Journal, 19*(3), 346-353.
Fonagy, P. (2003). *Clinical implications of attachment and mentalization: Efforts to preserve the mind in contemporary treatment - Part II - Epilogue*.
Fonagy, P. (2010). [Personal Communication].
Fonagy, P., Bateman, A., & Bateman, A. (2011). The widening scope of mentalizing: A discussion. *Psychology and Psychotherapy: Theory, Research and Practice, 84*(1), 98-110. doi: 10.1111/j.2044-8341.2010.02005.x
Fonagy, P., & Bateman, A. W. (2006). Mechanisms of change in mentalization-based treatment of BPD. *Journal of Clinical Psychology, 62*(4), 411-430.
Fonagy, P., Fearon, P., Steele, M., & Steele, H. (1998). Mentalization as a core component of parental sensitivity. *Infant Behavior and Development, 21*(1), 66-66.
Fonagy, P., Leigh, T., Steele, M., Steele, H., Kennedy, R., & Mattoon G., e. a. (1996). The relation of attachment status, psychiatric classification and response to psychotherapy. *Journal of Consulting and Clinical Psychology, 64*, 22-31.
Fonagy, P., & Luyten, P. (2009). A developmental, mentalization-based approach to the understanding and treatment of borderline personality disorder. *Development and Psychopathology, 21*(4), 1355-1381.
Fonagy, P., Steele, M., Steele, H., & Moran, G. S. (1991). The capacity for understanding mental states: The reflective self in parent and child and its significance for security of attachment. *Infant Mental Health Journal, 12*(3), 201-218.
Fonagy, P., Target, M., Steele, H., & Steele, M. (1998). *Reflective Functioning Manual, version 5, for application to Adult Attachment Interviews*. University College. London.
Fortuna, K., Holland, A. S., Roisman, G. I., Haydon, K. C., & Groh, A. M. (2011). Attachment States of Mind and the Quality of Young Adults' Sibling Relationships. *Developmental Psychology, 47*(5), 1366-1373.
Fraley, R. C., Niedenthal, P. M., Marks, M., Brumbaugh, C., & Vicary, A. (2006). Adult Attachment and the Perception of Emotional Expressions: Probing the Hyperactivating Strategies Underlying Anxious Attachment. *Journal of Personality, 74*(4), 1163-1190.
Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology, 78*(2), 350-365.
Freud, S. (1937). *Analysis terminable and interminable* (Vol. 23).
Fuertes, J. N., Mislowack, A., Brown, S., Gur-Arie, S., Wilkinson, S., & Gelso, C. J. (2007). Correlates of the real relationship in psychotherapy: A study of dyads. *Psychotherapy Research, 17*(4), 423-430. doi: 10.1080/10503300600789189
Fuertes, M., Santos, P. L. D., Beeghly, M., & Tronick, E. (2006). More than maternal sensitivity shapes attachment: infant coping and temperament. *Annals Of The New York Academy Of Sciences, 1094*, 292-296.
Funder, D. C., & Harris, M. J. (1986). On the several facets of personality assessment: The case of social acuity. *Journal of Personality, 54*(3), 528-550.
Fussell, F. W., & Bonney, W. C. (1990). A comparative study of childhood experiences of psychotherapists and physicists: Implications for clinical practice. *Psychotherapy: Theory, Research, Practice, Training, 27*(4), 505-512.

Gallo, L. C., Smith, T. W., & Ruiz, J. M. (2003). An Interpersonal Analysis of Adult Attachment Style: Circumplex Descriptions, Recalled Developmental Experiences, Self-Representations, and Interpersonal Functioning in Adulthood. *Journal of Personality, 71*(2), 141-182.

Gamer, J., Schmukle, S. C., Luka-Krausgrill, U., & Egloff, B. (2008). Examining the Dynamics of the Implicit and the Explicit Self-Concept in Social Anxiety: Changes in the Implicit Association Test–Anxiety and the Social Phobia Anxiety Inventory Following Treatment. *Journal of Personality Assessment, 90*(5), 476-480. doi: 10.1080/00223890802248786

Gelso, C., & Carter, J. (1985). The Relationship in Counseling and Psychotherapy. *The Counseling Psychologist, 13*(2), 155-243.

Gelso, C. J. (2011a). Contextualizing the real relationship in psychotherapy and psychoanalysis *The real relationship in psychotherapy: The hidden foundation of change.* (pp. 3-23). Washington, DC US: American Psychological Association.

Gelso, C. J. (2011b). *The real relationship in psychotherapy: The hidden foundation of change*. Washington, DC US: American Psychological Association.

Gelso, C. J. (2011c). The reality of the other *The real relationship in psychotherapy: The hidden foundation of change.* (pp. 41-55): American Psychological Association.

Gelso, C. J., & Carter, J. A. (1994). Components of the Psychotherapy Relationship: Their Interaction and Unfolding during Treatment. *Journal of Counseling Psychology, 41*(3), 296-306.

Gelso, C. J., Kelley, F. A., Fuertes, J. N., Marmarosh, C., Holmes, S. E., Costa, C., et al. (2005). Measuring the Real Relationship in Psychotherapy: Initial Validation of the Therapist Form. *Journal of Counseling Psychology, 52*(4), 640-649.

George, C., Kaplan, N., & Main, M. (1996). *Adult Attachment Interview*. Department of Psychology, University
of California. Berkeley.

George, C., & West, M. (2001). The development and preliminary validation of a new measure of adult attachment: the adult attachment projective. *Attachment & Human Development, 3*(1), 30-61.

Gergely, G., & Watson, J. S. (1996). The social biofeedback theory of parental affect-mirroring: the development of emotional self-awareness and self-control in infancy. *The International Journal Of Psycho-Analysis, 77 (Pt 6)*, 1181-1212.

Gillath, O., Sesko, A. K., Shaver, P. R., & Chun, D. S. (2010). Attachment, authenticity, and honesty: Dispositional and experimentally induced security can reduce self- and other-deception. *Journal of Personality and Social Psychology, 98*(5), 841-855.

Goldfried, M. R., & Wolfe, B. E. (1998). Toward a more clinically valid approach to therapy research. *Journal of Consulting and Clinical Psychology, 66*(1), 143-150.

Goldman, B. M., & Kernis, M. H. (2002). The role of authenticity in healthy psychological functioning and subjective well-being. *Annals of the American Psychotherapy Assn, 5*(6), 18-20.

Goldstein, K. (1939). The nature of partitive processes *The organism: A holistic approach to biology derived from pathological data in man.* (pp. 157-211): American Book Publishing.

Gordon, R. D. (1985). *Empathy: The State of the Art and Science*.

Grande, T., Dilg, R., Jakobsen, T., Keller, W., Krawietz, B., Langer, M., et al. (2009). Structural change as a predictor of long-term follow-up outcome. *Psychotherapy Research, 19*(3), 344-357. doi: 10.1080/10503300902914147

Greenberg, L. S., & Watson, J. C. (2006). Transformation: The Construction of Alternatives *Emotion-focused therapy for depression.* (pp. 281-301): American Psychological Association.

Greenson, R. R., & Wexler, M. (1969). The non-transference relationship in the psychoanalytic situation. *The International Journal of Psychoanalysis, 50*(1), 27-39.
Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology, 74*(6), 1464-1480.
Groesbeck, C. J. (1975). The archetypal image of the wounded healer. *The Journal of Analytical Psychology, 20*(2), 122-145.
Gullo, S., Lo Coco, G., & Gelso, C. (2012). Early and later predictors of outcome in brief therapy: the role of real relationship. *Journal of Clinical Psychology, 68*(6), 614-619. doi: 10.1002/jclp.21860
Gunn, J. E. (2007). *Supervisee attachment: Relationship to the alliance and disclosure in supervision.* Ph.D., Purdue University, United States -- Indiana. Retrieved from http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/304839374?accountid=13380
Gurman, A. S. (1977). Therapist and patient factors influencing the patient's perception of facilitative therapeutic conditions. *Psychiatry: Journal for the Study of Interpersonal Processes, 40*(3), 218-231.
Haggerty, G., Hilsenroth, M. J., & Vala-Stewart, R. (2009). Attachment and interpersonal distress: examining the relationship between attachment styles and interpersonal problems in a clinical population. *Clinical Psychology & Psychotherapy, 16*(1), 1-9.
Hall, J. A., & Schmid Mast, M. (2007). Sources of accuracy in the empathic accuracy paradigm. *Emotion, 7*(2), 438-446.
Hassenstab, J., Dziobek, I., Rogers, K., Wolf, O. T., & Convit, A. (2007). Knowing what others know, feeling what others feel: A controlled study of empathy in psychotherapists. *Journal of Nervous and Mental Disease, 195*(4), 277-281.
Hatcher, R. L., & Rogers, D. T. (2009). Development and validation of a measure of interpersonal strengths: The Inventory of Interpersonal Strengths. *Psychological Assessment, 21*(4), 554-569.
Hayes, J. A., Gelso, C. J., & Hummel, A. M. (2011). Managing countertransference. *Psychotherapy (Chicago, Ill.), 48*(1), 88-97. doi: 10.1037/a0022182
Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology, 52*(3), 511-524.
Heck, E. J., & Davis, C. S. (1973). Differential expression of empathy in a counseling analogue. *Journal of Counseling Psychology, 20*(2), 101-104.
Henry, W. P., Schacht, T. E., & Strupp, H. H. (1986). Structural analysis of social behavior: Application to a study of interpersonal process in differential psychotherapeutic outcome. *Journal of Consulting and Clinical Psychology, 54*(1), 27-31.
Henry, W. P., Strupp, H. H., Butler, S. F., Schacht, T. E., & Binder, J. L. (1993). Effects of training in time-limited dynamic psychotherapy: Changes in therapist behavior. *Journal of Consulting and Clinical Psychology, 61*(3), 434-440.
Hill, C. E., Helms, J. E., Spiegel, S. B., & Tichenor, V. (1988). Development of a system for categorizing client reactions to therapist interventions. *Journal of Counseling Psychology, 35*(1), 27-36.
Hill, C. E., & Lambert, M. J. (2004). Methodological issues in studying psychotherapy process and outcomes. In M. J. Lambert (Ed.), *Bergin and Garfield's Handbook of Psychotherapy and Behaviour Change* (Fifth Edition ed., pp. 84-135). New York: John Wiley & Sons.
Hill, L. L., Levy, K. N., Meehan, K. B., & Reynoso, J. S. (2007). Reliability of a multidimensional measure for scoring reflective function. *Journal of the American Psychoanalytic Association, 55*(1), 309-313.
Holmes, S. B. (2009). On the nature of expertise in family therapy.

Hongwanishkul, D., Happaney, K., Lee, W., & Zelazo, P. D. (2005). Assessment of Hot and Cool Executive Function in Young Children: Age-Related Changes and Individual Differences. *Developmental Neuropsychology, 28*(2), 617-644.
Horney, K. (1950). *Neurosis and human growth; the struggle toward self-realization*. Oxford England: W. W. Norton.
Horowitz, L. M., Rosenberg, S. E., Baer, B. A., Ureno, G., & Villasenor, V. S. (1988). Inventory of interpersonal problems: Psychometric properties and clinical applications. *Journal of Consulting and Clinical Psychology, 56*(6), 885-892.
Horvarth, A. O., & Greenberg, L. (1989). Development and validation of the Working Alliance Inventory. *Journal of Counseling Psychology, 36*, 223-232.
Horvath, A. O., Del Re, A. C., Flückiger, C., & Symonds, D. (2011). Alliance in individual psychotherapy. *Psychotherapy, 48*(1), 9-16.
Hughes, C., Happé, F., Taylor, A., Jaffee, S. R., Caspi, A., & Moffitt, T. E. (2005). Origins of Individual Differences in Theory of Mind: From Nature to Nurture? *Child Development, 76*(2), 356-370.
Husserl, E. (1891). *Philosophie der Arithmetik. Pyschologische und logische Untersuchungen. [Philosophy of arithmetic. Psychological and logical investigations.]*. Halle-Saale: Erster Band.
Ickes, W. (1993). Empathic Accuracy. *Journal of Personality, 61*(4), 587.
Ickes, W. (2009). *Empathic Accuracy: Its Links to Clinical, Cognitive, Developmental, Social, and Physiological Psychology*. Cambridge: M I T Press.
Ickes, W., Buysse, A. N. N., Pham, H. A. O., Rivers, K., Erickson, J. R., Hancock, M., et al. (2000). On the difficulty of distinguishing "good" and "poor" perceivers: A social relations analysis of empathic accuracy data. *Personal Relationships, 7*(2), 219-234. doi: 10.1111/j.1475-6811.2000.tb00013.x
Jackson, S. W. (2001). Presidential Address: The Wounded Healer. *Bulletin of the History of Medicine, 75*(1), 1-36.
Johnson, J. M. (2005). *Attachment, support, coping, and distress in adults maltreated as children: An interpersonal perspective.* 66 Ph.D. dissertation, York University, Canada. Retrieved August 6, 2010, from Dissertations & Theses: Full Text.(Publication No. AAT NQ99191).
Joireman, J. (2004). Relationships Between Attributional Complexity and Empathy. *Individual Differences Research, 2*(3), 197-202.
Josephs, L., & Bornstein, R. F. (2011). Beyond the illusion of structural change: A process priming approach to psychotherapy outcome research. *Psychoanalytic Psychology, 28*(3), 420-434.
Jurist, E. L., Meehan, K. B., Obegi, J. H., & Berant, E. (2009). Attachment, mentalization, and reflective functioning *Attachment theory and research in clinical work with adults.* (pp. 71-93). New York, NY US: Guilford Press.
Kagan, N., & Michigan State Univ, E. L. (1972). *Influencing Human Interaction*.
Kaland, N., Moller-Nielsen, A., Callesen, K., Mortensen, E. L., Gottlieb, D., & Smith, L. (2002). A new 'advanced' test of theory of mind: evidence from children and adolescents with Asperger syndrome. *Journal of Child Psychology & Psychiatry & Allied Disciplines, 43*(4), 517.
Kammeyer-Mueller, J., Steel, P. D. G., & Rubenstein, A. (2010). The Other Side of Method Bias: The Perils of Distinct Source Research Designs. *Multivariate Behavioral Research, 45*(2), 294-321. doi: 10.1080/00273171003680278
Karen, R. (1994). *Becoming attached: First relationships and how they shape out capacity to love*. New York, NY US: Oxford University Press.
Karpf, F. B. (1953). *The psychology and psychotherapy of Otto Rank; an historical and comparative introduction*. Oxford England: Philosophical Library.

Kelley, F. A., Gelso, C. J., Fuertes, J. N., Marmarosh, C., & Lanier, S. H. (2010). The real relationship inventory: development and psychometric investigation of the client form. *Psychotherapy (Chicago, Ill.), 47*(4), 540-553.

Kelly, G. A. (1955). *The psychology of personal constructs. Vol. 1. A theory of personality. Vol. 2. Clinical diagnosis and psychotherapy*. Oxford England: W. W. Norton.

Kim, D. M., Wampold, B. E., & Bolt, D. M. (2006). Therapist effects in psychotherapy: A random-effects modeling of the National Institute of Mental Health Treatment of Depression Collaborative Research Program data. [Article]. *Psychotherapy Research, 16*(2), 161-172. doi: 10.1080/10503300500264911

Kinderman, P., Dunbar, R., & Bentall, R. P. (1998). Theory-of-mind deficits and causal attributions. *British Journal of Psychology, 89*(2), 191.

Kirchmann, H., Mestel, R., Schreiber-Willnow, K., Mattke, D., Seidler, K. P., Daudert, E., et al. (2009). Associations among attachment characteristics, patients' assessment of therapeutic factors, and treatment outcome following inpatient psychodynamic group psychotherapy. [Article]. *Psychotherapy Research, 19*(2), 234-248. doi: 10.1080/10503300902798367

Kirmayer, L. J. (2003). Asklepian Dreams: The Ethos of the Wounded-Healer in the Clinical Encounter. *Transcultural Psychiatry, 40*(2), 248.

Klein, M. H., Mathieu-Coughlan, P., Kiesler, D. J., Greenberg, L. S., & Pinsof, W. M. (1986). The experiencing scales *The psychotherapeutic process: A research handbook.* (pp. 21-71). New York, NY US: Guilford Press.

Klein, M. H., Mathieu, P. L., Gendlin, E. T., & Kiesler, D. J. (1969). *The Experiencing Scale: A Research and Training Manual* (Vol. 1). Madison: University of Wisconsin Extension Bureau of Audiovisual Instruction.

Kolden, G. G., Klein, M. H., Wang, C.-C., & Austin, S. B. (2011). Congruence/genuineness. *Psychotherapy, 48*(1), 65-71.

Kotov, K. M. (2003). *Verbal, nonverbal and dyadic components of reflective function.* PhD Dissertation, City University of New York, United States -- New York. Retrieved August 30, 2010, from Dissertations & Theses: Full Text.(Publication No. AAT 3063848).

Kulley, J. C. (1994). *Attachment style categorization and the relationships among attachment styles and psychosocial adjustment during college.* Ph.D., The University of Texas at Austin, United States -- Texas. Retrieved from http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/304139879?accountid=13380

http://sf5mc5tj5v.search.serialssolutions.com/?ctx_ver=Z39.88-2004&ctx_enc=info:ofi/enc:UTF-8&rfr_id=info:sid/ProQuest+Dissertations+%26+Theses+%28PQDT%29&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&rft.genre=dissertations+%26+theses&rft.jtitle=&rft.atitle=&rft.au=Kulley%2C+Jeffrey+Charles&rft.aulast=Kulley&rft.aufirst=Jeffrey&rft.date=1994-01-01&rft.volume=&rft.issue=&rft.spage=&rft.isbn=&rft.btitle=&rft.title=Attachment+style+categorization+and+the+relationships+among+attachment+styles+and+psychosocial+adjustment+during+college&rft.issn=

Lafferty, P., Beutler, L. E., & Crago, M. (1989). Differences between more and less effective psychotherapists: A study of select therapist variables. *Journal of Consulting and Clinical Psychology, 57*(1), 76-80.

Laitila, A. (2009). The expertise question revisited: Horizontal and vertical expertise. *Contemporary Family Therapy, 31*(4), 239-250.

Lambert, M. J. (1989). The individual therapist's contribution to psychotherapy process and outcome. *Clinical Psychology Review, 9*(4), 469-485.

Lambert, M. J. (2013). The Efficacy and Effectiveness of Psychotherapy. In M. J. Lambert (Ed.), *Bergin and Garfield's Handbook of Psychotherapy and Behavior Change* (6th ed., pp. 274-351). Hokoben, New Jersey: John Wiley & Sons.

Lambert, M. J., DeJulio, S. S., & Stein, D. M. (1978). Therapist interpersonal skills: Process, outcome, methodological considerations, and recommendations for future research. *Psychological Bulletin, 85*(3), 467-489.

Lambert, M. J., Morton, J.J., Hatfield, D., Harmon, C., Hamilton, S., Reid, R. C., Shimokowa, K., Christopherson, C., and Burlingame, G. M. (2004). *Administration and Scoring Manual for the Outcome Questionnaire-45*. Orem, UT: American Professional Credentialing Services.

Laranjo, J., Bernier, A., & Meins, E. (2008). Associations between maternal mind-mindedness and infant attachment security: Investigating the mediating role of maternal sensitivity. *Infant Behavior and Development, 31*(4), 688-695.

Leary, T. (1957). *Interpersonal diagnosis of personality; a functional theory and methodology for personality evaluation*. Oxford England: Ronald Press.

Lecours, S. (1995). *La Grille de l'Élaboration Verbale de l'Affect (GÉVA). Manuel de cotation.* . Université de Montréal.

Lecours, S. (2007). Supportive interventions and nonsymbolic mental functioning. *International Journal of Psychoanalysis, 88*(4), 895-915.

Lecours, S., & Bouchard, M.-A. (1997). Dimensions of mentalisation: Outlining levels of psychic transformation. *The International Journal of Psychoanalysis, 78*(5), 855-875.

Lecours, S., Bouchard, M.-A., St-Amand, P., & Perry, J. C. (2000). Assessing verbal elaboration of affect in psychotherapy: A preliminary report and single case study. *Psychotherapy Research, 10*(1), 47-56.

Lecours, S., & Bouchard, M. A. (2011). Verbal elaboration of distinct affect categories and BPD symptoms. *Psychology and Psychotherapy: Theory, Research and Practice, 84*(1), 26-41.

Levy, K. N., Meehan, K. B., Weber, M., Reynoso, J., & Clarkin, J. F. (2005). Attachment and Borderline Personality Disorder: Implications for Psychotherapy. *Psychopathology, 38*(2), 64-74.

Lo, C., Walsh, A., Mikulincer, M., Gagliese, L., Zimmermann, C., & Rodin, G. (2009). Measuring attachment security in patients with advanced cancer: psychometric properties of a modified and brief Experiences in Close Relationships scale. *Psycho-Oncology, 18*(5), 490-499. doi: 10.1002/pon.1417

Lomis, M. J., & Baker, L. L. (1985). Microtraining of forensic psychiatric patients for empathic counseling skills. *Journal of Counseling Psychology, 32*(1), 84-93.

Lopes dos Santos, P., Fuertes, M., & Sanches-Ferreira, M. (2005). A percepção materna dos atributos temperamentais do bebé: Características psicométricas de um questionário e seu valor prognóstico

relativamente à qualidade da vinculação. In J. Bairrão (Ed.), *Desenvolvimento: Contextos familiares e educativos* (pp. 142-170). Porto: Livpsic.

Lorenz, K. (1935). Der Kumpen in der Umwelt des Vogels. Der Artgenosse als auslosendes Moment sozialer Verhaltensweisen. *Journal fur Ornithologie, 83*, 137-215, 289-413.

Luborsky, L., Crits-Christoph, P., McLellan, A. T., Woody, G., Piper, W., Liberman, B., et al. (1986). Do therapists vary much in their success? Findings from four outcome studies. *The American Journal Of Orthopsychiatry, 56*(4), 501-512.

Luborsky, L., McLellan, A. T., Diguer, L., Woody, G., & Seligman, D. A. (1997). The psychotherapist matters: Comparison of outcomes across twenty-two therapists and seven patient samples. *Clinical Psychology: Science and Practice, 4*(1), 53-65.

Luborsky, L., McLellan, A. T., Woody, G. E., O'Brien, C. P., & Auerbach, A. (1985). Therapist success and its determinants. *Archives Of General Psychiatry, 42*(6), 602-611.

Luquet, P. (1981). Le changement dans la mentalisation. *Rev. Franç. Psychanal., 45*, 1023-1028.

Lutz, W., Leon, S. C., Martinovich, Z., Lyons, J. S., & Stiles, W. B. (2007). Therapist effects in outpatient psychotherapy: A three-level growth curve approach. [Article]. *Journal of Counseling Psychology, 54*(1), 32-39. doi: 10.1037/0022-0167.54.1.32

Main, M., & Goldwyn, R. (1984). Predicting rejection of her infant from mother's representation of her own experience: implications for the abused-abusing intergenerational cycle. *Child Abuse & Neglect, 8*(2), 203-217.

Main, M., & Weston, D. R. (1981). The quality of the toddler's relationship to mother and to father: Related to conflict behavior and the readiness to establish new relationships. *Child Development, 52*, 932-940.

Makari, G. (2008). *Revolution in Mind: The Creation of Psychoanalysis*. New York: Harper Collins.

Mallinckrodt, B., Gantt, D. L., & Coble, H. M. (1995). Attachment patterns in the psychotherapy relationship: Development of the Client Attachment to Therapist Scale. *Journal of Counseling Psychology, 42*(3), 307-317.

Mallinckrodt, B., Porter, M. J., & Kivlighan, D. M., Jr. (2005). Client Attachment to Therapist, Depth of In-Session Exploration, and Object Relations in Brief Psychotherapy. *Psychotherapy: Theory, Research, Practice, Training, 42*(1), 85-100.

Mander, G. (2004). The selection of candidates for training in psychotherapy and counselling. *Psychodynamic Practice: Individuals, Groups and Organisations, 10*(2), 161-172.

Maniei, F. (1984). Cognitive Complexity and Empathy in Counseling.

Marangoni, C., Ickes, W., Garcia, S., & Teng, G. (1995). Empathic Accuracy in a Clinically Relevant Setting. *Journal of Personality & Social Psychology, 68*(5), 854-869.

Marangoni, C. A. (1989). *The facilitative effect of feedback training on objectively assessed empathic accuracy in a clinically relevant context.* Ph.D., The University of Texas at Arlington, United States -- Texas. Retrieved from http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/303802450?accountid=13380
http://sf5mc5tj5v.search.serialssolutions.com/?ctx_ver=Z39.88-2004&ctx_enc=info:ofi/enc:UTF-8&rfr_id=info:sid/ProQuest+Dissertations+%26+Theses+%28PQDT%29&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&rft.genre=dissertations+%26+theses&rft.jtitle=&rft.atitle=&rft.au=Marangoni%2C+Carol+Ann&rft.aulast=Marangoni&rft.aufirst=Carol&rft.date=1989-01-01&rft.volume=&rft.issue=&rft.spage=&rft.isbn=&rft.btitle=&rft.title=The+facilitative+effect+of+feedback+training+on+objectively+assessed+empathic+accuracy+in+a+clinically+relevant+context&rft.issn=

Marmarosh, C. L., Gelso, C. J., Markin, R. D., Majors, R., Mallery, C., & Choi, J. (2009). The Real Relationship in Psychotherapy: Relationships to Adult Attachments, Working Alliance, Transference, and Therapy Outcome. [Article]. *Journal of Counseling Psychology, 56*(3), 337-350. doi: 10.1037/a0015169

Martin, D. J., Garske, J. P., & Davis, M. K. (2000). Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. *Journal of Consulting and Clinical Psychology, 68*(3), 438-450.

Martínez Guzmán, C., & Nuñez Medina, C. (2007). Entrevista de prototipos de apego adulto (EPAA): Propiedades psicométricas de su versión en Chile. *Revista Interamericana de Psicología, 41*(3), 261-274.

Marty, P. (1991). *Mentalisation et psychosomatique*. Paris: Delagrange.
Marty, P., & Michel, d. M. U. (1963). La pensée opératoire. Intervention sur le rapport de M. Fain et Ch. David: Aspects fonctionnels de la view onirique. *Revue française de psychanalyse, 27*, 345-356.
Marvin, R., Cooper, G., Hoffman, K., & Powell, B. (2002). The Circle of Security project: Attachment-based intervention with caregiver-pre-school child dyads. *Attachment & Human Development, 4*(1), 107-124.
Marziali, E., & Alexander, L. (1991). The power of the therapeutic relationship. *American Journal of Orthopsychiatry, 61*(3), 383.
Maslow, A. H. (1943). Preface to motivation theory. *Psychosomatic Medicine, 5*, 85-92.
Matos, M. N. (1999). *Attachment patterns as a predictor of adult-sibling relationships*. Psy.D., Miami Institute of Psychology of the Caribbean Center for Advanced Studies, United States -- Florida. Retrieved from http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/304570205?accountid=13380
http://sf5mc5tj5v.search.serialssolutions.com/?ctx_ver=Z39.88-2004&ctx_enc=info:ofi/enc:UTF-8&rfr_id=info:sid/ProQuest+Dissertations+%26+Theses+%28PQDT%29&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&rft.genre=dissertations+%26+theses&rft.jtitle=&rft.atitle=&rft.au=Matos%2C+Marta+Nilda&rft.aulast=Matos&rft.aufirst=Marta&rft.date=1999-01-01&rft.volume=&rft.issue=&rft.spage=&rft.isbn=0599274867&rft.btitle=&rft.title=Attachment+patterns+as+a+predictor+of+adult-sibling+relationships&rft.issn=
McCluskey, U. (2005). *To be met as a person: The dynamics of attachment in professional encounters*. London England: Karnac Books.
McCluskey, U., Hooper, C.-A., & Miller, L. B. (1999). Goal-corrected empathic attunement: Developing and rating the concept within an attachment perspective. *Psychotherapy: Theory, Research, Practice, Training, 36*(1), 80-90.
McCoach, D. B. (2010). Hierarchical Linear Modeling. In G. R. Hancock & R. O. Mueller (Eds.), *The Reviewer's Guide to Quantitative Methods in the Social Sciences* (pp. 123-140): Taylor & Francis.
Meehan, K. (2009). Measuring Reflective Function With a Multidimensional Rating Scale: Comparison With Scoring Reflective Function On the AAI. *Journal of the American Psychoanalytic Association, 57*(1), 208-213.
Meins, E. (1999). Sensitivity, security and internal working models: Bridging the transmission gap. *Attachment & Human Development, 1*(3), 325 - 342.
Meins, E., & Fernyhough, C. (1999). Linguistic acquisitional style and mentalising development: The role of maternal mind-mindedness. *Cognitive Development, 14*(3), 363-380.
Meyer, B., Pilkonis, P. A., Krupnick, J. L., Egan, M. K., Simmens, S. J., & Sotsky, S. M. (2002). Treatment expectancies, patient alliance and outcome: Further analyses from the National Institute of Mental Health Treatment of Depression Collaborative Research Program. *Journal of Consulting and Clinical Psychology, 70*(4), 1051-1055.
Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change*. New York, NY US: Guilford Press.
Miller, G. D., & Baldwin Jr, D. C. (1987). Implications of the Wounded-Healer Paradigm for the Use of the Self in Therapy. *Journal of Psychotherapy & The Family, 3*(1), 139-151. doi: 10.1300/J287v03n01_13
Minami, T., Davies, D. R., Tierney, S. C., Bettmann, J. E., McAward, S. M., Averill, L. A., et al. (2009). Preliminary evidence on the effectiveness of psychological treatments

delivered at a university counseling center. *Journal of Counseling Psychology, 56*(2), 309-320.
Mohr, J. J., Gelso, C. J., & Hill, C. E. (2005). *Client and counselor trainee attachment as predictors of session evaluation and countertransference behavior in first counseling sessions*.
Montag, C., Ehrlich, A., Neuhaus, K., Dziobek, I., Heekeren, H. R., Heinz, A., et al. (2009). Theory of mind impairments in euthymic bipolar patients. *Journal of Affective Disorders*.
Monti , P. M., Wallander , J., Ahern , D., Abrams , D. B., & Munroe , S. M. (1983). Multi-modal measurement of anxiety and social skills in a behavioral role-play test: Generalizability and discriminant validity. *Behavioural Assessment, 6*, 15-25.
Muran, J. C. (2002). A relational approach to understanding change: Plurality and contextualism in a psychotherapy research program. *Psychotherapy Research, 12*(2), 113-138.
Muran, J. C., Samstag, L. W., Jilton, R., Batchelder, S., & Winston, A. (1997). Development of a suboutcome strategy to measure interpersonal process in psychotherapy from an observer perspective. *Journal Of Clinical Psychology, 53*(5), 405-420.
Najavits, L. M., & Strupp, H. H. (1994). Differences in the effectiveness of psychodynamic therapists: A process-outcome study. *Psychotherapy: Theory, Research, Practice, Training, 31*(1), 114-123.
Nelson, C. A. (1995). The ontogeny of human memory: A cognitive neuroscience perspective. *Developmental Psychology, 31*(5), 723-738.
Nolte, T., Fonagy, P., Blatt, S. J., & Rutherford, H. (2009). *Effects of attachment related stress on performance in emotion recognition - using idiosyncratic stressors in adults*. Paper presented at the 10th International Congress Of The International Neuropsychoanalysis Society, CAMPUS CORDELIERS, PARIS. Poster Presentation retrieved from www.neuro-psa.org.uk/download/abstrcts_prs_web.doc
Norcross, J. C., & Wampold, B. E. (2011). Evidence-based therapy relationships: Research conclusions and clinical practices. *Psychotherapy, 48*(1), 98-102.
O'Connor, T. G., & Croft, C. M. (2001). A Twin Study of Attachment in Preschool Children. *Child Development, 72*(5), 1501.
O'Donovan, A., Bain, J. D., & Dyck, M. J. (2005). Does Clinical Psychology Education Enhance the Clinical Competence of Practitioners? *Professional Psychology: Research and Practice, 36*(1), 104-111.
O'Donovan, A., Dyck, M., & Bain, J. D. (2001). Trainees' experience of postgraduate clinical training. *Australian Psychologist, 36*(2), 149-156.
O'Donovan, A., & Dyck, M. J. (2005). Does a Clinical Psychology Education Moderate Relationships Between Personality or Emotional Adjustment and Performance As a Clinical Psychologist? *Psychotherapy: Theory, Research, Practice, Training, 42*(3), 285-296.
Obiols, J. (2009). The historical roots of Theory of Mind: the work of James Mark Baldwin. *History of Psychiatry, 20*(3), 377-392.
Okiishi, J., Lambert, M. J., Nielsen, S. L., & Ogles, B. M. (2003). Waiting for supershrink: An empirical analysis of therapist effects. *Clinical Psychology & Psychotherapy, 10*(6), 361-373.
Okiishi, J. C. (2000). *Waiting for supershrink: An empirical analysis of therapist effects.* Ph.D., Brigham Young University, United States -- Utah. Retrieved from http://gateway.library.qut.edu.au/login?url=http://proquest.umi.com/pqdweb?did=727783991&Fmt=7&clientId=14394&RQT=309&VName=PQD
Okiishi, J. C., Lambert, M. J., Eggett, D., Nielsen, L., Dayton, D. D., & Vermeersch, D. A. (2006). An analysis of therapist treatment effects: Toward providing feedback to

individual therapists on their clients' psychotherapy outcome. [Article]. *Journal of Clinical Psychology, 62*(9), 1157-1172. doi: 10.1002/jclp.20272
Orlinsky, D. D. E., Rønnestad, M. H., & Ambühl, H. (2005). *How Psychotherapists Develop: A Study Of Therapeutic Work And Professional Growth*: Amer Psychological Assn.
Parish, M., & Eagle, M. N. (2003). Attachment to the therapist. *Psychoanalytic Psychology, 20*(2), 271-286.
Parker, M. L., Johnson, L., & Ketring, S. (2011). Assessing Attachment of Couples in Therapy: A Factor Analysis of the Experiences in Close Relationships Scale. *Contemporary Family Therapy, 33*(1), 37-48. doi: 10.1007/s10591-011-9142-x
Patterson, C. H. (1985). Therapeutic Genuiness. In C. H. PATTERSON. (Ed.), *The Therapeutic Relationship: Foundations for an eclectic psychotherapy* (pp. 63-65). Pacific Grove, CA: Brooks/Cole.
Perner, J., & Lang, B. (2000). Theory of mind and executive function: Is there a developmental relationship? *Understanding other minds: Perspectives from developmental cognitive neuroscience (2nd ed.).* (pp. 150-181). New York, NY US: Oxford University Press.
Pilkonis, P. A. (1988). Personality prototypes among depressives: Themes of dependency and autonomy. *Journal of Personality Disorders, 2*(2), 144-152.
Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of Method Bias in Social Science Research and Recommendations on How to Control It. *Annual Review of Psychology, 63*(1), 539-569. doi: doi:10.1146/annurev-psych-120710-100452
Pos, A. E., Greenberg, L. S., Elliott, R., & Lebow, J. L. (2008). Experiential therapy *Twenty-first century psychotherapies: Contemporary approaches to theory and practice.* (pp. 80-122). Hoboken, NJ US: John Wiley & Sons Inc.
Premack, D., & Woodruff, G. (1978). Does the chimpanzee have a theory of mind? *Behavioral and Brain Sciences, 1*(4), 515-526.
Preston, S. D., & de Waal, F. B. M. (2002). Empathy: Its ultimate and proximate bases. *Behavioral and Brain Sciences, 25*(1), 1-20.
Ricks, D. F., Thomas, A., & Roff, M. (1974). Supershrink: Methods of a therapist judged successful on the basis of adult outcomes of adolescent patients *Life history research in psychopathology: III.* Minneapolis, MN US: University of Minnesota Press.
Ridley, C. R., Kelly, S. M., & Mollen, D. (2011). Microskills Training: Evolution, Reexamination, and Call for Reform. *Counseling Psychologist, 39*(6), 800-824.
Rizq, R. (2011). Straddling the contradictions: Understanding and conceptualising the role of attachment status in counselling psychologists' accounts of personal therapy. *European Journal of Psychotherapy & Counselling, 13*(3), 187-211.
Rizq, R., & Target, M. (2008). 'The power of being seen': an interpretative phenomenological analysis of how experienced counselling psychologists describe the meaning and significance of personal therapy in clinical practice. *British Journal of Guidance & Counselling, 36*(2), 131-153.
Rizq, R., & Target, M. (2010a). 'If that's what I need, it could be what someone else needs.' Exploring the role of attachment and reflective function in counselling psychologists' accounts of how they use personal therapy in clinical practice: a mixed methods study. *British Journal of Guidance & Counselling, 38*(4), 459-481.
Rizq, R., & Target, M. (2010b). 'We had a constant battle'. The role of attachment status in counselling psychologists' experiences of personal therapy: Some results from a mixed-methods study. *Counselling Psychology Quarterly, 23*(4), 343-369.
Robinson, V., & Halliday, J. (1987). A critique of the microcounselling approach to problem understanding. *British Journal of Guidance & Counselling, 15*(2), 113-124.

Roemer, W. W. (1986). Leary's circle matrix: A comprehensive model for the statistical measurement of Horney's clinical concepts. *The American Journal of Psychoanalysis, 46*(3), 249-262.
Rogers, C. R. (1942a). *Counseling and Psychotherapy: Newer concepts in practice*. Cambridge Massachusetts: Houghton Mifflin Company.
Rogers, C. R. (1942b). The use of electrically recorded interviews in improving psychotherapeutic techniques. *American Journal of Orthopsychiatry, 12*, 429-435.
Rogers, C. R. (1954). Toward a theory of creativity. *Etc., 11*, 249-260.
Rogers, C. R. (1957/2007). The necessary and sufficient conditions of therapeutic personality change. *Psychotherapy: Theory, Research, Practice, Training, 44*(3), 240-248.
Rogers, C. R. (1959). A theory of therapy, personality and interpersonal relationships as developed in the client-centered framework. In S. Koch (Ed.), *Psychology: A study of a science. Vol. 3: Formulations of the person and the social context* (pp. 184-256). New York: McGraw-Hill.
Rogers, C. R. (1961). *On becoming a person*. Oxford England: Houghton Mifflin.
Rogers, C. R. (1961/1995). *On Becoming a Person*. Boston: Houghton Mifflin Company.
Rogers, C. R. (1974). In retrospect: Forty-six years. *American Psychologist, 29*(2), 115-123.
Rogers, C. R. (1975). Empathic: An unappreciated way of being. *The Counseling Psychologist, 5*(2), 2-10.
Roisman, G. I., Fraley, R. C., & Belsky, J. (2007). A taxometric study of the Adult Attachment Interview. *Developmental Psychology, 43*(3), 675-686.
Roisman, G. I., Holland, A., Fortuna, K., Fraley, R. C., Clausell, E., & Clarke, A. (2007). The Adult Attachment Interview and self-reports of attachment style: An empirical rapprochement. *Journal of Personality and Social Psychology, 92*(4), 678-697.
Romano, V. (2008). *Attachment in psychotherapy-the secure base hypothesis and the role of the therapist.* 69, McGill University (Canada), Canada. Retrieved August 30, 2010, from Dissertations & Theses: Full Text.(Publication No. AAT NR38639).
Rosenzweig, S. (1936). SOME IMPLICIT COMMON FACTORS IN DIVERSE METHODS OF PSYCHOTHERAPY. *American Journal of Orthopsychiatry, 6*(3), 412-415. doi: 10.1111/j.1939-0025.1936.tb05248.x
Rubino, G., Barker, C., Roth, T., & Fearon, P. (2000). Therapist empathy and depth of interpretation in response to potential alliance ruptures: The role of therapist and patient attachment styles. [Article]. *Psychotherapy Research, 10*(4), 408-420.
Rudden, M., Milrod, B., Target, M., Ackerman, S., & Graf, E. (2006). Reflective Functioning in Panic Disorder Patients: a Pilot Study. *Journal of the American Psychoanalytic Association, 54*(4), 1339-1343.
Rudolf, G., Grande, T., & Oberbracht, C. (1997). *A research strategy for measuring structural change in psychoanlytic psychotherapies*, Ulm, Germany.
Russell, J., Mauthner, N., Sharpe, S., & Tidswell, T. (1991). The 'windows task' as a measure of strategic deception in preschoolers and autistic subjects. *British Journal of Developmental Psychology, 9*(2), 331-349.
Rutherford, H. J. V., Wareham, J. D., Vrouva, I., Mayes, L. C., Fonagy, P., & Potenza, M. N. (2012). Sex differences moderate the relationship between adolescent language and mentalization. *Personality Disorders, 3*(4), 393-405. doi: 10.1037/a0028938
Sabbagh, R. (2005). *Adult attachment and wives' empathic accuracy during conflict resolution.* Ph.D., University of Toronto (Canada), Canada. Retrieved from http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/276647495?accountid=13380
http://sf5mc5tj5v.search.serialssolutions.com/?ctx_ver=Z39.88-2004&ctx_enc=info:ofi/enc:UTF-8&rfr_id=info:sid/ProQuest+Dissertations+%26+Theses+%28PQDT%29&rft_val_fm

t=info:ofi/fmt:kev:mtx:dissertation&rft.genre=dissertations+%26+theses&rft.jtitle=&rft.atitle=&rft.au=Sabbagh%2C+Ruwa&rft.aulast=Sabbagh&rft.aufirst=Ruwa&rft.date=2005-01-01&rft.volume=&rft.issue=&rft.spage=&rft.isbn=9780494078372&rft.btitle=&rft.title=Adult+attachment+and+wives%27+empathic+accuracy+during+conflict+resolution&rft.issn=

Sauer, E. M., Lopez, F. G., & Gormley, B. (2003). Respective contributions of therapist and client adult attachment orientations to the development of the early working alliance: A preliminary growth modeling study. *Psychotherapy Research, 13*(3), 371-382.

Schauenburg, H., Buchheim, A., Beckh, K., Nolte, T., Brenk-Franz, K., Leichsenring, F., et al. (2009). The influence of psychodynamically oriented therapists' attachment representations on outcome and alliance in inpatient psychotherapy abstract. *Psychotherapy Research*.

Scherpenzeel, A., & Saris, W. (1997). The Validity and Reliability of Survey Questions. *Sociological Methods & Research, 25*(3), 341-383.

Schmidt, S., Nachtigall, C., Wuethrich-Martone, O., & Strauss, B. (2002). Attachment and coping with chronic disease. [Article]. *Journal of Psychosomatic Research, 53*(3), 763-773.

Shakow, D. (1966). Kurt Goldstein: 1878-1965. *The American Journal of Psychology, 79*(1), 150-154.

Shapiro, D. A., Firth-Cozens, J., & Stiles, W. B. (1989). The question of therapists' differential effectiveness. A Sheffield Psychotherapy Project addendum. *The British Journal Of Psychiatry: The Journal Of Mental Science, 154*, 383-385.

Sharp, C., & Fonagy, P. (2008). The Parent's Capacity to Treat the Child as a Psychological Agent: Constructs, Measures and Implications for Developmental Psychopathology. *Social Development, 17*(3), 737-754.

Sharp, C., Williams, L. L., Ha, C., Baumgardner, J., Michonski, J., Seals, R., et al. (2009). The development of a mentalization-based outcomes and research protocol for an adolescent inpatient unit. *Bulletin of the Menninger Clinic, 73*(4), 311-338.

Shaver, P. R., Belsky, J., & Brennan, K. A. (2000). The adult attachment interview and self-reports of romantic attachment: Associations across domains and methods. *Personal Relationships, 7*(1), 25-43.

Sheldon, K. M., Ryan, R. M., Rawsthorne, L. J., & Ilardi, B. (1997). Trait self and true self: Cross-role variation in the Big-Five personality traits and its relations with psychological authenticity and subjective well-being. *Journal of Personality and Social Psychology, 73*(6), 1380-1393.

Singer, M. (2005). A TWICE-TOLD TALE: A PHENOMENOLOGICAL INQUIRY INTO CLIENTS' PERCEPTIONS OF THERAPY. *Journal of Marital and Family Therapy, 31*(3), 269-282.

Slade, A. (2005). Parental reflective functioning: An introduction. *Attachment & Human Development, 7*(3), 269 - 281.

Slade, A., Belsky, J., Aber, J. L., & Phelps, J. L. (1999). Mothers' representations of their relationships with their toddlers: Links to adult attachment and observed mothering. *Developmental Psychology, 35*(3), 611-619.

Smith, D. W. (2011). Phenomenology. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy* (Fall 2011 Edition ed.).

Snijders, T. O. M., & Bosker, R. (1994). Modeled Variance in Two-Level Models. *Sociological Methods & Research, 22*(3), 342-363.

Snyder, W. U. (1947). A comparison of one unsuccessful with four successful nondirectively counseled cases. *Journal of Consulting Psychology, 11*(1), 38-42.

Snygg, D., & Combs, A. W. (1949). *Individual Behaviour*. New York: Harper and Bothers.

Sollod, R. N. (1978). Carl Rogers and the origins of client-centered therapy. *Professional Psychology, 9*(1), 93-104.
Spector, P. E. (2006). Method Variance in Organizational Research: Truth or Urban Legend? *Organizational Research Methods, 9*(2), 221-232.
Spivack, J. D. (1974). Interpersonal process recall: Implications for psychotherapy. *Psychotherapy: Theory, Research & Practice, 11*(3), 235-238.
Stocker, C. M., Lanthier, R. P., & Furman, W. (1997). Sibling relationships in early adulthood. *Journal of Family Psychology, 11*(2), 210-221.
Stone, D. (2008). Wounded Healing: Exploring the Circle of Compassion in The Helping Relationship. *Humanistic Psychologist, 36*(1), 45-51.
Strachan, A., & Shiffman, S. (1980). The Prediction of Therapeutic Empathy in Nonclinical Psychologists.
Strauss, B., Kirchmann, H., Eckert, J., Lobo-Drost, A., Marquet, A., Papenhausen, R., et al. (2006). Attachment characteristics and treatment outcome following inpatient psychotherapy: Results of a multisite study. *Psychotherapy Research, 16*(5), 573-586.
Strauss, B. M., Lobo-Drost, A. J., & Pilkonis, P. A. (1999). Assessment of attachment styles in adults - Preliminary experiences with the German version of prototype evaluation. [Article]. *Zeitschrift Fur Klinische Psychologie Psychiatrie Und Psychotherapie, 47*(4), 347-364.
Stroud, J. B. (1950). Individual Behavior: Review. *Journal of Educational Psychology, 41*(2), 124-125.
Talwar, V., Carlson, S. M., & Lee, K. (2011). Effects of a Punitive Environment on Children's Executive Functioning: A Natural Experiment. *Social Development, 20*(4), 805-824. doi: 10.1111/j.1467-9507.2011.00617.x
Thompson, B. J., & Hill, C. E. (1991). Therapist Perceptions of Client Reactions. *Journal of Counseling and Development : JCD, 69*(3), 261-261.
Todd, S. Y., Crook, T. R., & Barilla, A. G. (2005). Hierarchical Linear Modeling of Multilevel Data. *Journal of Sport Management, 19*(4), 387.
Tronick, E. Z., & Weinberg, K. (1990). *The Infant Regulatory Scoring System (IRSS)*. Children's Hospital and Harvard Medical School, Boston.
Truax, C. B. (1961). *A scale for the measurement of accurate empathy*. Discussion Paper. Wisconsin Psychiatric Institute. University of Wisconsin. Wisconsin.
Truax, C. B. (1963). The empirical emphasis in psychotherapy: A symposium. Effective ingredients in psychotherapy: An approach to unraveling the patient-therapist interaction. *Journal of Counseling Psychology, 10*(3), 256-263.
Truax, C. B., Wargo, D. G., Frank, J. D., Imber, S. D., Battle, C. C., Hoehn-Saric, R., et al. (1966). Therapist empathy, genuineness, and warmth and patient therapeutic outcome. *Journal of Consulting Psychology, 30*(5), 395-401.
Vermeersch, D., Lambert, M., & Burlingame, G. (2000). Outcome Questionnaire: Item Sensitivity to Change. *Journal of Personality Assessment, 74*(2), 242-261.
Vrouva, I., & Fonagy, P. (2008). *Mind the mind! The Mentalization Stories' Test for Adolescents*. Paper presented at the winter meeting of the American Psychoanalytic Association, New York City, NY.
Vrouva, I., & Fonagy, P. (2009). Development of the mentalizing stories for adolescents (MSA). [Meeting Abstract]. *Journal of the American Psychoanalytic Association, 57*(5), 1174-1179.
Vrouva, I., Target, M., & Ensink, K. (2012). Measuring mentalization in children and young people *Minding the child: Mentalization-based interventions with children, young people and their families.* (pp. 54-76). New York, NY US: Routledge/Taylor & Francis Group.

Vygotsky, L. S. (1925). Consciousness as a problem in the psychology of behavior (N. Veresov, Trans.) *Undiscovered Vygotsky: Etudes on the pre-history of cultural-historical psychology*: Peter Lang Publishing.
Wallerstein, R. S. (2001). The generations of psychotherapy research: An overview. *Psychoanalytic Psychology, 18*(2), 243-267.
Wampold, B. E. (2007). Psychotherapy: the humanistic (and effective) treatment. *The American Psychologist, 62*(8), 855-873.
Wampold, B. E. (2012, Monday, December 10, 2012 10:05 PM). [Personal Communication].
Wampold, B. E. (2013, Friday, February 22, 2013 5:59 PM). [Personal Communication].
Wampold, B. E., & Bolt, D. M. (2007). The consequences of "anchoring" in longitudinal multilevel models: bias in the estimation of patient variability and therapist effects. *Psychotherapy Research, 17*(5), 509-514.
Wampold, B. E., & Brown, G. S. (2005). Estimating Variability in Outcomes Attributable to Therapists: A Naturalistic Study of Outcomes in Managed Care. *Journal of Consulting and Clinical Psychology, 73*(5), 914-923.
Warwar, S. H., Links, P. S., Greenberg, L., & Bergmans, Y. (2008). Emotion-focused principles for working with borderline personality disorder. *Journal Of Psychiatric Practice, 14*(2), 94-104.
Waters, E., & Hamilton, C. E. (2000). The Stability of Attachment Security from Infancy to Adolescence and Early Adulthood: General Introduction. *Child Development, 71*(3), 678.
Waters, E., & Merrick, S. (2000). Attachment Security in Infancy and Early Adulthood: A Twenty-Year Longitudinal Study. *Child Development, 71*(3), 684.
Waters , E., Treboux , D., Fyffe, C., Crowell, J. A., & Corcoran, D. (2005). *Scoring Secure versus Insecure and Dismissing versus Preoccupied Attachment as Continuous Variables: Discriminant Analysis Using AAI State of Mind Scales*. Unpublished paper. Department of Psychology. State University Of New York At Stony Brook.
Waters, H. S., Rodrigues, L. M., & Ridgeway, D. (1998). Cognitive Underpinnings of Narrative Attachment Assessment. *Journal of Experimental Child Psychology, 71*(3), 211-234.
Waters, H. S., & Waters, E. (2006). The attachment working models concept: Among other things, we build script-like representations of secure base experiences. *Attachment & Human Development, 8*(3), 185 - 197.
Watson, J. C., & Bedard, D. L. (2006). Clients' emotional processing in psychotherapy: A comparison between cognitive-behavioral and process-experiential therapies. *Journal of Consulting and Clinical Psychology, 74*(1), 152-159.
Watson, S. A. (2009). *Attachment representations and parenting : the assessment of cognitive complexity and emotional security with the adult attachment interview.* Doctor of Philosophy in Education (Human Development) Thesis or Dissertation, Massey University, Palmerston North, 4442, New Zealand.
Webb, C. A. (2012). *Processes of symptom change in psychotherapy: Investigating the role of therapist adherence, competence and the therapeutic alliance.* 3542902, University of Pennsylvania, Ann Arbor. Retrieved from http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/1171044627?accountid=13380
http://sf5mc5tj5v.search.serialssolutions.com/?ctx_ver=Z39.88-2004&ctx_enc=info:ofi/enc:UTF-8&rfr_id=info:sid/ProQuest+Dissertations+%26+Theses+Full+Text&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&rft.genre=dissertations+%26+theses&rft.jtitle=&rft.atitle=&rft.au=Webb%2C+Christian+A.&rft.aulast=Webb&rft.aufirst=Christian&rft.date=2012-01-

01&rft.volume=&rft.issue=&rft.spage=&rft.isbn=9781267713940&rft.btitle=&rft.title=Processes+of+symptom+change+in+psychotherapy%3A+Investigating+the+role+of+therapist+adherence%2C+competence+and+the+therapeutic+alliance&rft.issn=

Wei, M., Russell, D. W., Mallinckrodt, B., & Vogel, D. L. (2007). The Experiences in Close Relationship Scale (ECR)-short form: reliability, validity, and factor structure. *Journal of Personality Assessment, 88*(2), 187-204.

Weinstock, D. K. (2002). *Implications of individual attachment styles for adult empathy and other emotional responses.* Ph.D., The University of Arizona, United States -- Arizona. Retrieved from http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/304802898?accountid=13380

http://sf5mc5tj5v.search.serialssolutions.com/?ctx_ver=Z39.88-2004&ctx_enc=info:ofi/enc:UTF-8&rfr_id=info:sid/ProQuest+Dissertations+%26+Theses+%28PQDT%29&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&rft.genre=dissertations+%26+theses&rft.jtitle=&rft.atitle=&rft.au=Weinstock%2C+David+Keith&rft.aulast=Weinstock&rft.aufirst=David&rft.date=2002-01-01&rft.volume=&rft.issue=&rft.spage=&rft.isbn=9780493766225&rft.btitle=&rft.title=Implications+of+individual+attachment+styles+for+adult+empathy+and+other+emotional+responses&rft.issn=

Wenegrat, A. (1974). A factor analytic study of the Truax Accurate Empathy Scale. *Psychotherapy: Theory, Research & Practice, 11*(1), 48-51.

Wenegrat, A. (1976). Linguistic variables of therapist speech and accurate empathy ratings. *Psychotherapy: Theory, Research & Practice, 13*(1), 30-33.

Widman, T. (2011). *Factors that Influence Cross-validation of Hierarchical Linear Models.* Ph.D., Georgia State University, United States -- Georgia. Retrieved from http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/887699684?accountid=13380

Wiggins, J. S., Trapnell, P., & Phillips, N. (1988). Psychometric and geometric characteristics of the Revised Interpersonal Adjective Scales (IAS-R). *Multivariate Behavioral Research, 23*(4), 517-530.

Wong, K.-C. (1995). *A narrative approach to empathy.* Ph.D., University of Minnesota, United States -- Minnesota. Retrieved from http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/304223617?accountid=13380

http://sf5mc5tj5v.search.serialssolutions.com/?ctx_ver=Z39.88-2004&ctx_enc=info:ofi/enc:UTF-8&rfr_id=info:sid/ProQuest+Dissertations+%26+Theses+%28PQDT%29&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&rft.genre=dissertations+%26+theses&rft.jtitle=&rft.atitle=&rft.au=Wong%2C+Kai-Cheng&rft.aulast=Wong&rft.aufirst=Kai-Cheng&rft.date=1995-01-01&rft.volume=&rft.issue=&rft.spage=&rft.isbn=&rft.btitle=&rft.title=A+narrative+approach+to+empathy&rft.issn=

Zahavi, D. (2008). Phenomenology. In D. Moran (Ed.), *Routledge Companion to Twentieth-Century Philosophy* (pp. 661-692). Abingdon: Routledge.

Zaki, J., Bolger, N., & Ochsner, K. (2008). It Takes Two: The Interpersonal Nature of Empathic Accuracy. *Psychological Science (Wiley-Blackwell), 19*(4), 399-404.

Zaki, J., & Ochsner, K. (2012). The neuroscience of empathy: progress, pitfalls and promise. *Nat Neurosci, 15*(5), 675-680.

Zerubavel, N., & Wright, M. O. D. (2012). The dilemma of the wounded healer. *Psychotherapy, 49*(4), 482-491.

Zimmer, J. M., & Anderson, S. (1968). DIMENSIONS OF POSITIVE REGARD AND EMPATHY. *Journal of Counseling Psychology, 15*(5, Pt.1), 417-426.
Zuroff, D. C., Kelly, A. C., Leybman, M. J., Blatt, S. J., & Wampold, B. E. (2010). Between-therapist and within-therapist differences in the quality of the therapeutic relationship: effects on maladjustment and self-critical perfectionism. *Journal of Clinical Psychology, 66*(7), 681-697.

Appendices

13.1 Appendix A – The Adult Attachment Interview

I'm going to be interviewing you about how your childhood experiences may have affected your adult personality.

1. Could you start by helping me get oriented to your early family situation, where you lived, where you born, if you moved around a lot, what your family did for a living, if you have siblings, etc? (spend 2-3 minutes on this question)

    a. Who would you say raised you? (if it seems like they might have been raised by several persons, ask) Did other people live in your home growing up?

    b. Ask about grandparents-if they were a part of their life, if they are still alive, etc if not alive, ask when they died, if they knew much about them.

2. I'd like you to try to describe your relationship with your parents as a young child, starting from as far back as you can remember. (encourage 5 or earlier, but age 5-12 ok

3. Now, I'd like you to choose 5 words or adjective that reflect your relationship with your mother starting from as far back as you can remember in early childhood-early as you can go but say age 5-12 is fine.

    a. Now let me go through some more questions about your description of your childhood relationship with your mother. You say your relationship was_____. Can you think of a memory or incident that would illustrate why you chose _____ to describe the relationship?

        i. Repeat with all 5 words

    b. Repeat the above with father.

    c. Repeat with any other primary caregiver.

4. Which parent did you feel closest to and why? Why isn't there this feeling with the other parent?

    a. Ask even if it is previously discussed. "I know you've already discussed this but I'd like to ask you about it briefly anyway…"

5. When you were upset as a child what would you do?

    a. When you were upset <u>emotionally</u> when you were little what would you do? …. Can you think of a specific time that happened?

    b. Can you remember what would happen when you were <u>hurt physically</u>? Do any specific incidents come to mind? Any other incidents?

c. Were you ever ill when you were little? Do you remember what would happen?

d. If not spontaneously reported ask if the client remembers being held by either of his/her parents at any of these times- when upset, hurt or ill?

6. What is the first time you remember being separated from you parents?

a. How did you respond? Do you remember how your parents responded?

b. Are there any other separations that stand out in your mind?

7. Did you ever feel rejected as a young child? (even if they now know it wasn't rejection, but at the time of being a young child felt rejected)

a. How old were you when you first felt this way, and what did you do?

b. Why do you think your parent did those things-do you think he/she realized he/she was rejecting you?

c. Did you ever feel pushed away or ignored?

d. Were you ever frightened or worried as a child?

8. Were your parents ever threatening with you in any way- maybe for discipline or jokingly?

a. For example, some have said that their parents would threaten to leave them or send them away from home/

i. If yes, ask specifically about only one form of punishment (like silent treatment)

b. Some people have memories of threats or some kind of behavior that was abusive.

i. Did anything like this ever happen to you, or in your family?

1. How old were you at the time? Did it happen frequently?

2. Do you feel this experience affects you now as an adult?

3. Does it influence you approach to your own child?

ii. Did you have any such experiences involving people outside your family?

1. Use same probes as previous question.

9. In general, how do you think your overall experiences with your parents have affected your adult personality?

a. Are there any aspects of your early experiences that you feel were a set-back in your development? A negative effect on the way you turned out?

10. Why do you think your parents behaved the way they did during your childhood?

11. Were there any other adults with whom you were close, like parents, as a child?

a. Or just any other adults you were close to?

12. Did you experience the loss of a parent or other close loved one while you were a young child- for example, a sibling, or a close family member?

a. Could you tell me about the circumstances, and how old you were at the time?

b. How did you respond at the time?

c. Was this death sudden or was it expected?

d. Can you recall your feelings at the time?

e. Have your feelings regarding this death changed much over time?

f. Did you attend the funeral and what was this like for you?

g. If it was a parent or sibling- What would you say was the effect on your (other parent) and on your household, and how did this change over the years?

h. Would you say this loss has had an effect on your adult personality? (if applicable, on your approach to your own child?)

13. Did you lose any other important persons during your childhood?

a. Have you lost other close persons, in adult years? (Go through same queries as above)

14. Other than any difficult experiences you've already described, have you had any other experiences which you would regard as potentially traumatic? (anything which was overwhelmingly and immediately terrifying)

15. Now I'd like to ask you a few more questions about your relationship with your parents. Were there many changes in your relationship with your parents (or remaining parent) after childhood? We'll get to the present in a moment, but right now I mean changes occurring roughly between your childhood and your adulthood?

16. Now I'd like to ask you, what is your relationship with your parents like for your now?

a. Do you have much contact with your parents at present?

b. What would you say the relationship with your parents is like currently?

c. Could you tell me about any (or any other) sources of dissatisfaction in your current relationship with your parents? Any special sources of sources of satisfaction?

17. I'd like to move now to a different sort of question-it's not about your relationship with your parents, instead it's about an aspect of your current relationship with (current children)? How do you respond now, in terms of feelings, when you separate from your child/children? Do you ever feel worried about your child?

    a. If no children, Imagine you have a one year old child and I wonder how you think you might respond in terms of feelings if you had to separate from this child? Do you think you would ever feel worried about this child?

18. If you had three wishes for your child twenty years from now, what would they be? I'm thinking partly of the kind of future you would like to see for your child.

    a. Phrase this for the imaginary child if applicable

19. Is there any particular thing which you feel you learned above all from your own childhood experiences? I'm thinking here of something you feel you might have gained from the kind of childhood you had.

20. We've just talked about what you think you may have learned from your own childhood experiences. I'd like to end by asking you what would you hope any child you may have might learn from his/her experiences of being parented by you?

[Additional probes to be used as required after any question:

- How did you respond to that?
- Do you remember how you felt?
- Could you elaborate?
- A specific question about something they said, but not anything leading]

13.2 Appendix B – The Experiences in Close Relationships (ECR) Scale

The statements below concern how you feel in emotionally intimate relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it, on the 7-point scale provided.

Disagree Strongly Agree Strongly
1 2 3 4 5 6 7

1. I prefer not to show people how I feel deep down.
2. I worry about being abandoned.
3. I am very comfortable being close to people.
4. I worry a lot about my relationships.
5. Just when someone starts to get close to me I find myself pulling away.
6. I worry that people won't care about me as much as I care about them.
7. I get uncomfortable when someone wants to be very close.
8. I worry a fair amount about losing people I'm close to.
9. I don't feel comfortable opening up to people.
10. I often wish that others feelings for me were as strong as my feelings for them.
11. I want to get close to people, but I keep pulling back.
12. I often want to merge completely with partners, and this sometimes scares them away.
13. I am nervous when people get too close to me.
14. I worry about being alone.
15. I feel comfortable sharing my private thoughts and feelings with people I'm close to.
16. My desire to be very close sometimes scares people away.
17. I try to avoid getting too close to people.
18. I need a lot of reassurance that I am loved.
19. I find it relatively easy to get close to people.
20. Sometimes I feel that I force my partners to show more feeling, more commitment.
21. I find it difficult to allow myself to depend on people.
22. I do not often worry about being abandoned.
23. I prefer not to be too close to people.
24. If I can't get my partner to show interest in me, I get upset or angry.
25. I tell my partner just about everything.
26. I find that my partner(s) don't want to get as close as I would like.
27. I usually discuss my problems and concerns with my partner.
28. When I'm not involved in a relationship, I feel somewhat anxious and insecure.
29. I feel comfortable depending on people.
30. I get frustrated when my partner is not around as much as I would like.
31. I don't mind asking people for comfort, advice, or help.
32. I get frustrated if people are not available when I need them.
33. It helps to turn to my partner in times of need.
34. When people disapprove of me, I feel really bad about myself.
35. I turn to others for many things, including comfort and reassurance.
36. I resent it when my partner spends time away from me.

13.3 Appendix C - Outcome Questionnaire (OQ – 45.2)

Instructions: Looking back over the last week, including today, help us understand how you have been feeling. Read each item carefully and mark the box under each category which best describes your current situation (never, rarely, sometimes, frequently, almost always). For this questionnaire, work is defined as employment, school, housework, volunteer work, and so forth.

1. I get along well with others.
2. I tire quickly.
3. I feel no interest in things.
4. I feel stressed at work/school.
5. I blame myself for things.
6. I feel irritated.
7. I feel unhappy in my marriage/significant relationship.
8. I have thoughts of ending my life.
9. I feel weak.
10. I feel fearful.
11. After heavy drinking, I need a drink the next morning to get going. (If you do not drink, mark "never")
12. I find my work/school satisfying.
13. I am a happy person.
14. I work/study too much.
15. I feel worthless.
16. I am concerned about family troubles.
17. I have an unfulfilling sex life.
18. I feel lonely.
19. I have frequent arguments.
20. I feel loved and wanted.
21. I enjoy my spare time.
22. I have difficulty concentrating.
23. I feel hopeless about the future.
24. I like myself.
25. Disturbing thoughts come into my mind that I cannot get rid of.
26. I feel annoyed by people who criticize my drinking (or drug use). (If not applicable, mark "never")
27. I have an upset stomach.
28. I am not working/studying as well as I used to.
29. My heart pounds too much.
30. I have trouble getting along with friends and close acquaintances.
31. I am satisfied with my life.
32. I have trouble at work/school because of drinking or drug use (If not applicable, mark "never")
33. I feel that something bad is going to happen.
34. I have sore muscles.
35. I feel afraid of open spaces, of driving, of being on buses, subways and so forth.
36. I feel nervous.
37. I feel my love relationships are full and complete.
38. I feel that I am not doing well at work/school.

39. I have too many disagreements at work/school.
40. I feel something is wrong with my mind.
41. I have trouble falling asleep or staying asleep.
42. I feel blue.
43. I am satisfied with my relationships with others.
44. I feel angry enough at work/school to do something I might regret.
45. I have headaches.

13.4 Appendix D – End of Therapy Clinician Form

What type of therapy was undertaken with the client? *Please tick as many boxes as appropriate*

Psychodynamic	☐	Acceptance and Commitment Therapy (ACT)	☐
Cognitive Behavioural	☐	Systemic	☐
Solution Focused	☐	Interpersonal Psychotherapy (IPT)	☐
Narrative	☐	Integrative	☐
Person-centred	☐	Supportive	☐
Emotion Focused (EFT)	☐	Other (specify)	☐

If more than one type of therapy was undertaken, which was the predominant one?

_____

Identified Problems/Concerns

	None	Minimal	Mild	Moderate	Severe
Depression	☐	☐	☐	☐	☐
Anxiety/Stress	☐	☐	☐	☐	☐
Psychosis	☐	☐	☐	☐	☐
Personality Problems	☐	☐	☐	☐	☐
Cognitive/Learning Difficulties	☐	☐	☐	☐	☐
Physical Problems	☐	☐	☐	☐	☐
Eating Disorder	☐	☐	☐	☐	☐
Addiction	☐	☐	☐	☐	☐
Trauma/Abuse	☐	☐	☐	☐	☐
Bereavement/Loss	☐	☐	☐	☐	☐
Self Esteem	☐	☐	☐	☐	☐
Self-Harm	☐	☐	☐	☐	☐
Aggressive/Disruptive/Agitated Behaviour	☐	☐	☐	☐	☐
Hallucinations/Delusions	☐	☐	☐	☐	☐
Interpersonal/Relationship Problems	☐	☐	☐	☐	☐
Living Conditions/Welfare	☐	☐	☐	☐	☐
Work/Academic	☐	☐	☐	☐	☐
Activities of Daily Living	☐	☐	☐	☐	☐
Other (specify)	☐	☐	☐	☐	☐

Describe the main presenting problem: _____

13.5 Appendix E – Client Demographic Details

Age: _____

Gender: ☐Female ☐Male (tick which applies)

Is English your first language? (tick which applies)

☐Yes

☐No, my first language is _____

Please indicate the highest level of education you have completed:

☐Primary

☐Secondary

☐Trade qualification

☐Tertiary qualification

What is your employment status? (tick the best description)

☐Employed Full Time (including self-employed)

☐Employed Part Time (including self-employed)

☐Employed Casually

☐Not in the workforce (e.g. looking after dependents etc)

☐Unemployed

Please indicate briefly what you would call the problem or difficulty for which you are seeking counselling (e.g. depression, anxiety, stress, grief, etc)

_____

_____

13.6 Appendix F – Therapist Demographics

ID: _____

Age: _____ Year of postgraduate training _____

Gender: ☐ Female ☐ Male (tick which applies)

Please indicate your most preferred therapeutic orientation:

- ☐ Psychodynamic
- ☐ Cognitive Behavioural
- ☐ Humanistic/Emotion Focussed/Process-Experiential/Client-centred
- ☐ Narrative
- ☐ Solution Focussed
- ☐ Systems Theory
- ☐ Interpersonal (IPT)
- ☐ Acceptance and Commitment Therapy (ACT)
- ☐ Integrative
- ☐ Other

How many years of experience as a psychotherapist or counsellor do you have? _____

Is English your first language? (tick which applies)

- ☐ Yes
- ☐ No, my first language is _____

13.7 Appendix G – Ethics Approval

(See next page)

University Human Research Ethics Committee

HUMAN ETHICS APPROVAL CERTIFICATE NHMRC Registered Committee Number EC00171

Date of Issue: 30/8/10 (supersedes all previously issued certificates)

Dear Mr John Cologon

A UHREC should clearly communicate its decisions about a research proposal to the researcher and the final decision to approve or reject a proposal should be communicated to the researcher in writing. This Approval Certificate serves as your written notice that the proposal has met the requirements of the *National Statement on Research involving Human Participation* and has been approved on that basis. You are therefore authorised to commence activities as outlined in your proposal application, subject to any specific and standard conditions detailed in this document.

Within this Approval Certificate are:

Project Details
Participant Details
Conditions of Approval (Specific and Standard)

Researchers should report to the UHREC, via the Research Ethics Coordinator, events that might affect continued ethical acceptability of the project, including, but not limited to:

(a) serious or unexpected adverse effects on participants; and
(b) proposed significant changes in the conduct, the participant profile or the risks of the proposed research.

Further information regarding your ongoing obligations regarding human based research can be found via the Research Ethics website http://www.research.qut.edu.au/ethics/ or by contacting the Research Ethics Coordinator on 07 3138 2091 or ethicscontact@qut.edu.au

If any details within this Approval Certificate are incorrect please advise the Research Ethics Unit within 10 days of receipt of this certificate.

Project Details

Category of Approval: Human - Committee **Approved From:** 2/06/2010 **Approved Until:** 2/06/2013 (subject to annual reports) **Approval Number:** 1000000310 **Project Title:** Therapist mentalization, therapist attachment and therapist effectiveness: implications for psychotherapy training **Chief Investigator:** Mr John Cologon **Other Staff/Students:** A/Prof Robert Schweitzer , Dr Zoe Hazelwood , Mr Ross Wilkinson **Experiment Summary:** Investigate whether appropriately targeted training can increase the therapeutic effectiveness of intern psychologists.

Participant Details

Participants:
Approximately 30 intern psychologists

Location/s of the Work:
Psychology Clinics -- Queensland University of Technology, Australian National University, University of Sydney, Griffith University, University of Western Sydney, University of Queensland, University of Canberra, University of Wollongong

Conditions of Approval

Specific Conditions of Approval:

University Human Research Ethics Committee

HUMAN ETHICS APPROVAL CERTIFICATE NHMRC Registered Committee Number EC00171

Date of Issue:30/8/10 (supersedes all previously issued certificates)

No special conditions placed on approval by the UHREC. Standard conditions apply.

Standard Conditions of Approval:
The University's standard conditions of approval require the research team to:

1. Conduct the project in accordance with University policy, NHMRC / AVCC guidelines and regulations, and the provisions of any relevant State / Territory or Commonwealth regulations or legislation;

2. Respond to the requests and instructions of the University Human Research Ethics Committee (UHREC);

3. Advise the Research Ethics Coordinator immediately if any complaints are made, or expressions of concern are raised, in relation to the project;

4. Suspend or modify the project if the risks to participants are found to be disproportionate to the benefits, and immediately advise the Research Ethics Coordinator of this action;

5. Stop any involvement of any participant if continuation of the research may be harmful to that person, and immediately advise the Research Ethics Coordinator of this action;

6. Advise the Research Ethics Coordinator of any unforeseen development or events that might affect the continued ethical acceptability of the project;

7. Report on the progress of the approved project at least annually, or at intervals determined by the Committee;

8. (Where the research is publicly or privately funded) publish the results of the project is such a way to permit scrutiny and contribute to public knowledge; and

9. Ensure that the results of the research are made available to the participants.

Modifying your Ethical Clearance:
Requests for variations must be made via submission of a Request for Variation to Existing Clearance Form (http://www.research.qut.edu.au/ethics/forms/hum/var/var.jsp) to the Research Ethics Coordinator. Minor changes will be assessed on a case by case basis.

It generally takes 7-14 days to process and notify the Chief Investigator of the outcome of a request for a variation.

Major changes, depending upon the nature of your request, may require submission of a new application.

Audits:
All active ethical clearances are subject to random audit by the UHREC, which will include the review of the signed consent forms for participants, whether any modifications / variations to the project have been approved, and the data storage arrangements.

End of Document

13.8 Appendix H – Research Risk Assessment Complex (Form B)

Project No.: **Date 28 / 5 / 2010**
School: Health
Supervisor: A/Prof Robert Schweitzer
Principal Researcher: Mr John Cologon **Student No. (where applicable): n7266006**

Research Project / Activity Information

Circle the appropriate research activity pertaining to this risk assessment:

- Research Project AND/OR
- Postgraduate Research - PhD Doctorate Masters Honours

Research Project / Activity Title:

Therapist Mentalization, Therapist Attachment and Therapist Effectiveness: Implications for Psychotherapy Training

Please provide a full and complete description of the Research Activities and Methods / Procedures that will be carried out (or attach an existing copy of these activities and procedures).

The subjects in this research project will be intern psychologists who are undertaking postgraduate studies in psychotherapy. Their attachment style will be measured in two ways. They will be asked to complete the Experiences in Close Relationships Scale, a self-report questionnaire which measures attachment style. In addition, their level of attachment security will be measured by means of the Attachment Script Method, which involves asking them to make up several stories, given a title and a list of words that must be included in the story. Therapist mentalization will also be assessed by two methods: the Movie for Assessing Social Cognition, which involves watching a short movie and answering questions about the feelings, thoughts and goals of the characters, and an interview.

Therapist effectiveness will be measured by asking the therapists to have clients they see at the university clinic complete the Outcome Questionnaire 45. Comparing client scores on this instrument between the beginning and end of therapy will provide an index of improvement. Examining the degree of improvement for several clients will give an indication of therapist effectiveness. Clients will also complete a client satisfaction survey, and the Working Alliance Inventory.

Specify and attach any established Standard Operating Procedures for this research project that have a current health & safety risk assessment.

N/A

Another risk assessment is not required for these Standard Operating Procedures. However, all new staff and students need to be trained in these Standard Operating Procedures and made aware of any relevant health & safety controls.

If SOPs are used please indicate with a tick whether:

☐

A copy of the QUT SOP's has been or will be provided to research staff/students with relevant controls.

☐ A copy of any partner or host organisation SOP's relevant to the project/research has been attached.

Please provide a full and complete description of the Research Activities and Procedures that will be carried out not involving Standard Operating Procedures (or attach an existing copy of these activities and procedures).

The subjects in this research project will be intern psychologists who are undertaking postgraduate studies in psychotherapy. Their attachment style will be measured in two ways. They will be asked to complete the Experiences in Close Relationships Scale, a self-report questionnaire which measures attachment style. In addition, their level of attachment security will be measured by means of the Attachment Script Method, which involves asking them to make up several stories, given a title and a list of words that must be included in the story. Therapist mentalization will also be assessed by two methods: the Movie for Assessing Social Cognition, which involves watching a short movie and answering questions about the feelings, thoughts and goals of the characters, and an interview.

Therapist effectiveness will be measured by asking the therapists to have clients they see at the university clinic complete the Outcome Questionnaire 45. Comparing client scores on this instrument between the beginning and end of therapy will provide an index of improvement. Examining the degree of improvement for several clients will give an indication of therapist effectiveness. Clients will also complete a client satisfaction survey, and the Working Alliance Inventory.

- **Workstation Set up and Safe Office**

Soft tissue pain and strain is common in workers who spend long hours at the computer without correct computer workstation set up and without adequate and regular breaks from computer work. It is important for all staff to set up their computer workstation correctly and ensure that they take regular breaks during extended periods of computer use.

It is the responsibility of supervisors to instruct staff and research students on correct workstation set up. It is also important for staff / students to regularly reassess their workstation set up over time.

Workstation and safe office set up checklists are available on the QUT Safety Advisory Services website at:
http://www.hrd.qut.edu.au/healthsafety/docs/keyboardassesschecklist.doc
http://www.hrd.qut.edu.au/healthsafety/docs/safeoffice.doc

Please indicate with a tick whether the workstation assessment and safe office checklists:

☑ Have been or will be conducted with the relevant research staff and students.

☐ Are not applicable to this project.

- **Project, Work and Equipment Details**

Estimated Commencement Date : / Estimated Completion Date (or continuing) : / /
/

External collaborators (other QUT Faculties and non-QUT parties):

Australian National University Psychology Clinic
University of Sydney Psychology Clinic
University of Queensland Psychology Clinic
University of Wollongong Psychology Clinic
and potentially any of the following, should they agree to participate:
Griffith University Psychology Clinic
University of Western Sydney Psychology Clinic
University of Queensland Psychology Clinic
University of Canberra Psychology Clinic

Location(s) of work, eg field site, building, room, campus:

University of Sydney Psychology Clinic, Transient Building F12, Fisher Rd, University of Sydney, Camperdown NSW 2006

Griffith University Psychology Clinic, Griffith University, Mount Gravatt, QLD, 4122

University of Western Sydney Psychology Clinic, Building 24, Level 1, 2 Bullecourt Avenue, Milperra, NSW

University of Queensland Psychology Clinic, Mc Elwain Psychology Building (Building 24A), The University of Queensland, St. Lucia, Q, 4072

Equipment types involved, if any :

Computers, chairs

- **Inductions and Training**

(Identify required inductions, competencies and training for staff and students prior to project commencement)

? Online General Evacuation
? Online Universi y Induction

- **First Aid**

First aid risk is identified as low. No hazardous materials are being used. participants will be setting and talking or using a computer. All aspects of the study will be conducted on campus at participating universities, who already have appropriate first aid arrangements in place.

- **Health & Safety Manuals**

Provide details of any health and safety manuals provided to research staff and students engaged on this research project (eg chemical safety manuals, laboratory manuals).

N/A

- •Are appropriate first aid items available? (Yes) No
- •Have first aid skills been acquired, if necessary? Yes No (N/A)
- •Has consideration been given to the requirement for after hours first aid treatment?

Yes No (N/A)

- **Ancillary Staff**

THERAPIST MENTALIZATION AND THERAPIST EFFECTIVENESS

Have ancillary staff (cleaners, technicians) been provided with appropriate information relating to special health & safety requirements? Yes No (N/A)

If yes, what information was provided ? :

_____

_____

_____

- **General Hazard Identification and Risk Assessment**

☑ Hazard identification for the activity has been undertaken, utilising the Hazard Checklist or as part of the Risk Assessment tool used.

No specific hazards have been identified, other than the normal possibility of repetitive strain injury from using a computer, which is addressed by using appropriately ergonomic seating arrangements .

Endorsements:

This project/work has been examined in consultation with the staff members involved and where appropriate, the Health and Safety Representative/Officer. The hazards associated with the work have been identified and the control measures where indicated have been implemented:

Principal Investigator and Chief Investigators involved:

Principal Investigator John Cologon Signature _____ Date / /

Chief Investigator John Cologon Signature _____ Date / /

Staff and / or postgraduate research students involved in the project / activity:

By signing this document, you acknowledge that:
- You have read the document
- You understand the hazards and the risk they represent
- You understand the controls that have been put in place
- You agree to utilise these controls to the best of your ability
- You will cease work and notify your supervisor if you are unable to implement the controls or they appear ineffective

Name _____ Signature _____ Date / /

Name _____ Signature _____ Date / /

Supervisor (where applicable):

By signing this document, you acknowledge that:
- You have read the document
- You have sought specialised advice as required
- You understand the hazards and the risks that have been identified
- You are not aware of any hazard or risk that has not been addressed
- You understand the controls that need to be put in place
- You agree to facilitate these controls to the best of your ability
- You agree to stop the work if the work group are unable to implement the controls or if the controls appear ineffective

Name A/Prof Robert Schweitzer Signature _____ Date / /

Name Dr Zoe Hazelwood Signature_____ Date / /

All staff and / or students who will be engaged on this project must sign this endorsement.

Once completed, this Health & Safety Risk Assessment Form is to be returned with the application for research ethics approval for this research project, to the Director of Research / Head of School who may pass this form to a relevant person for a Health & Safety Risk Review.

Final approval is given by the Head of School.Received by School Workplace Health & Safety Officer (or equivalent):

Name _____ Signature _____ Date / /

Workplace Health & Safety Officer Comments:

_____

_____

_____

_____

Acceptance by the Head of School:

Name _____ Signature _____ Date / /

School _____